| | | | | Course | | Number of | Size of | | Tutorial/Lab Schedule (if | | Duties | | | Emarganar | | Application Procedure |
|--|---------------|---------------|--|---------------------|--------------------|-------------------------------|-----------------------------|------------------------------|--|--|--|--------------|---------------|--------------------|--|---|
| Department | Campus | Course Number | Title | Enrolment (est.) | Position Type | Number of Positions (est.) | Appointment (# of hours) | Dates of Appointment | known) | Qualifications | | Posting Date | Closing Date | Emergency Posting? | Salary | |
| Department of Electrical and Computer Engineering | St. George | CSC326H1F | Programming Languages | 125 | Teaching Assistant | 1 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | expertise in Python, Lisp, Scheme, and Prolog; - programming styles and paradigms i.e. object oriented scripting | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | | \$44.44 per hour + 4% vacation pay x 60 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
| Department of Electrical and Computer Engineering | St. George | CSC444H1F | Software Engineering | 48 | Teaching Assistant | 2 | 30 | Sept 4, 2018 to Dec 31, 2018 | eering.utoronto.ca/Office_of_ | elicitation, analysis, | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | | \$44.44 per hour + 4% vacation pay x 30 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
| Department of Electrical and Computer Engineering | St. George | CSC467H1F | Compilers and Interpreters | 51 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in compiler organization, compiler writing tools, use of regular expressions - refer also to Course description | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | | \$44.44 per hour + 4% vacation pay x 30 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
| Department of Electrical and Computer Engineering | St. George | ECE201H1F | Electrical and Computer Engineering Seminar | 324 | Teaching Assistant | 2 | 10 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Advanced knowledge of Electrical and Computer Engineering | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | | \$44.44 per hour + 4% vacation pay x 10 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |

| Department of Electrical and Computer Engineering | St. George | ECE212H1F | Circuit Analysis | 331 | Teaching Assistant | 4 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | High level understanding of circuit theory | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44. per h + 4° vacat pay x houi | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you |
|--|---------------|-----------|-------------------|-----|--------------------|----|----|------------------------------|--|--|--|--------------|---------------|---|---|
| Department of Electrical and Computer Engineering | St. George | ECE241H1F | Digital Systems | 339 | Teaching Assistant | 16 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | The applicant must be proficient in digital systems design for FPGAs using Verilog, literate how to use a complex FPGA CAD system such as Altera's Quartus II or Xilinx' ISE. They should be familiar with Assembly Language-level programming of processors, and how assemblers work. This knowledge would be acquired by achieving good grades (above 80) in University of Toronto Courses ECE 241 (Digital Systems) and ECE 243 (Computer Organization) or ECE 253 (Digital and Computer Systems) | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44. per ht + 4º vacat pay x hour | disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
| Department of Electrical and Computer Engineering | St. George | ECE244H1F | gramming Fundamer | 341 | Teaching Assistant | 9 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Candidates must be proficient in C++ and have working knowledge of graphic libraries, event driven programming and integrated debugging environments under Linux and Windows. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44. per h + 4° vacat pay x hou | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you |

| Department of Electrical and Computer Engineering | St. George | ECE253H1F | Digital and Computer Systems | 156 | Teaching Assistant | 6 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | The applicant must be proficient in digital systems design for FPGAs using Verilog, literate how to use a complex FPGA CAD system such as Altera's Quartus II or Xilinx' ISE. They should be familiar with Assembly Language-level programming of processors, and how assemblers work. This knowledge would be acquired by achieving good grades (above 80) in University of Toronto Courses ECE 241 (Digital Systems) and ECE 243 (Computer Organization) or ECE 253 (Digital and Computer Systems) | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | per + vac pay | ŀ | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
|--|---------------|-----------|---|-----|--------------------|---|----|------------------------------|--|--|--|--------------|---------------|------------------------|--|---|
| | St. George | ECE302H1F | Probability and Applications | 282 | Teaching Assistant | 4 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Strong math and probabilty background | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | per + vac pay | hour 4% ation | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you |
| Department of Electrical and Computer Engineering | St. George | ECE311H1F | Dynamic Systems and Control | 128 | Teaching Assistant | 2 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Applicants should have expert knowledge in linear control theory, state space theory, signals and systems and complex analysis. Also refer to the Course description for other required knowledge. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | per + vac pay | 4.44 hour 4% ration x x 60 | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
| Department of Electrical and Computer Engineering | St. George | ECE314H1F | Fundamentals of Electrical Energy Systems | 62 | Teaching Assistant | 4 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in 3-phase systems, single line diagrams and complex power flow - see course description | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | per + vac pay | 4.44 hour 4% ration | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |

| | St. George | ECE316H1F | Communication Systems | 33 | Teaching Assistant | 1 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Firm grasp of key concepts in digital and analog communication theory, signals and systems. Operational knowledge of signal generators, oscilloscopes, spectrum analyzers | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hot + 4% vacatic pay x 6 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application |
|--|---------------|-----------|--------------------------|-----|--------------------|---|----|------------------------------|--|--|--|--------------|---------------|---|---|
| Department of Electrical and Computer Engineering | St. George | ECE320H1F | Fields and Waves | 121 | Teaching Assistant | 2 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Advanced knowledge of elctromagnetic theory, basic circuit theory and math skills. Operational knowledge of basic electrical test equipment i.e. oscilloscopes, multimeters - refer to course outline. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hot + 4% vacatic pay x 6 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you |
| Department of Electrical and Computer Engineering | St. George | ECE331H1F | Analog Electronics | 54 | Teaching Assistant | 1 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expert understanding of circuit theory, transistor amplifiers; feedback amplifier analysis; stability and compensation techniques using negative feedback | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hot + 4% vacatic pay x 6 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application |
| Department of Electrical and Computer Engineering | St. George | ECE334H1F | Digital Electronics | 77 | Teaching Assistant | 3 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in digital design techniques for intergrated circuits with emphasis on logic gates design at the transistor level | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hot + 4% vacatio pay x 6 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application |

| Department of Electrical and Computer Engineering | St. George | ECE335H1F | Introduction to Electronic Devices | 51 | Teaching Assistant | 1 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in electrical behaviour of semiconductor structures and devices. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44. per h + 4 vaca pay x hou | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you |
|--|---------------|-----------|---------------------------------------|-----|--------------------|---|----|------------------------------|--|--|--|--------------|---------------|--|---|
| Department of Electrical and Computer Engineering | St. George | ECE344H1F | Operating Systems | 146 | Teaching Assistant | 6 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Applicants must be well versed in operating system structures, concurrency, synchronization, deadlock, CPU scheduling, memory management and file systems. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44. per h + 4 vaca pay y hou | resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un |
| Department of Electrical and Computer Engineering | St. George | ECE345H1F | Algorithms and Data Structures | 280 | Teaching Assistant | 2 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in design and analysis of algorithms and data structures. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44. per h + 4 vacai pay y hou | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un/degraduates/ta/ by June 27, 2018. If during the application and/or selection process you |
| Department of Electrical and Computer Engineering | St. George | ECE349H1F | Introduction to Energy Systems | 61 | Teaching Assistant | 3 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | power. Mechanisms for | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44. per h + 4 vacai pay y hou | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you |
| Department of Electrical and Computer Engineering | St. George | ECE352H1F | Computer Organization | 54 | Teaching Assistant | 2 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undegrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | synchronous and | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44. per h + 4 vacai pay y hou | https://www.ece.utoronto.ca/undergraduates/ta/by June 27, 2018. If during the application and/or selection process you |

| Department of Electrical and Computer Engineering | St. George | ECE355H1 F | Signal Analysis and Communication | 53 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in continuous- time and discrete-time signals and system, characterization of linear time-invariant systems, Fourier analysis, linear filtering, sampling of continuous-time signals, and modulation techniques for communication systems. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hour + 4% vacation pay x 30 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
|--|---------------|------------|--------------------------------------|-----|--------------------|---|----|------------------------------|--|--|--|--------------|---------------|--|---|
| Department of Electrical and Computer Engineering | St. George | ECE360H1F | Electronics | 68 | Teaching Assistant | 1 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in basic electronics, frequency analysis, operational amplifiers, diodes, types of transistors | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hour + 4% vacation pay x 60 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un degraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
| Department of Electrical and Computer Engineering | St. George | ECE361H1F | Computer Networks I | 110 | Teaching Assistant | 6 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Excellent programming skills in Java and C++ | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hour + 4% vacation pay x 60 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
| Department of Electrical and Computer Engineering | St. George | ECE367H1F | Matrix Algebra and Optimization | TBA | Teaching Assistant | 1 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Applicants must have strong facility with linear algebra; strong expertise in optimization (to the level of Boyd & Vandenberghe, e.g., the ECE graduate course); good numerical/programming skills; strong writing skills and an interest and experience in classroom teaching as well as conceptualizing what students need to learn. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hour + 4% vacation pay x 60 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |

| Department of Electrical and Computer Engineering | St. George | ECE410H1F | Control Systems | 35 | Teaching Assistant | 1 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Applicants should have expert knowledge in linear control theory, state space theory, signals and systems and complex analysis. Also refer to the Course description for other required knowledge. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hou + 4% vacatio pay x 6 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application |
|--|---------------|-----------|-------------------------------|----|--------------------|---|----|------------------------------|--|---|--|--------------|---------------|---|---|
| Department of Electrical and Computer Engineering | St. George | ECE417H1F | Digital Communication | 15 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Basic concepts of digital communication. Baseband data transmission, intersymbol interference, Nyquist pulse shaping, equalization, line coding, multi-path fading, diversity. Binary and Mary modulation schemes, synchronization. Signal space concepts, optimum receivers, coherent and noncoherent detectors. Information theory, source encoding, error control coding, block and convolutional codes. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hou + 49% vacatio pay x3 hours | and/or selection process you require accommodation due to a disability, please contact Jayne |
| Department of Electrical and Computer Engineering | St. George | ECE424H1F | Microwave Circuits | 25 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in students in the design, simulation, fabrication, and test of practical passive and active microwave circuits using industry-standard RF/microwave simulation tools and measurement systems | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hou + 4% vacatio pay x 3 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you |
| Department of Electrical and Computer Engineering | St. George | ECE430H1F | Analog Integrated Circuits | 14 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in single-stage amplifiers and frequency response, including noise analysis; basic CMOS op amp; Advanced op amp circuits: telescopic and folded-cascode op amps;fully-differential op amps and common mode feedback. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hou + 4% vacatio pay x 3 hours | r are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, |

| | St. George | ECE431H1F | Digital Signal Processing | 49 | Teaching Assistant | 1 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in digital filtering and applications see Course description | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hour + 4% vacation pay x 60 hours | dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a |
|--|---------------|-----------|---------------------------------|----|--------------------|---|----|------------------------------|--|---|--|--------------|---------------|--|---|
| Department of Electrical and Computer Engineering | St. George | ECE445H1F | Neural Bioelectricity | 20 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Advanced knowledge of EEG signal processing, Machine Learning, Matlab GUI programming, C programming, PCB design, soldering, and testing. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hour + 4% vacation pay x 30 hours | |
| Department of Electrical and Computer Engineering | St. George | ECE446H1F | Sensory Communication | 20 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in acoustics and acoustic instrumentation operation | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hour + 4% vacation pay x 30 hours | |
| | St. George | ECE454H1F | Computer Systems Programming | 62 | Teaching Assistant | 3 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | TAs should have training in C/C++ programming and have taken courses in compilers and processor architecture | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hour + 4% vacation pay x 60 hours | |

| Department of Electrical and Computer Engineering | St. George | ECE461H1F | Internetworking | 96 | Teaching Assistant | 1 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in protocols for packet switching networks with emphasis on Internet type of networks - refer to course description for details | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hou + 4% vacatio pay x 60 hours | dergraduates/ta/ by June 27, 2018. If during the application |
|--|---------------|-----------|---|-----|--------------------|---|----|------------------------------|--|--|--|--------------|---------------|--|--|
| | St. George | ECE470H1F | Robot Modelling and Control | 53 | Teaching Assistant | 1 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in robot manipulators, kinematic modeling, forward and inverse kinematics, velocity kinematics, path planning, point-to-point trajectory planning, dynamic modeling, Euler-Langrange equations, inverse dynamics, joint control, computed torque control, passivity-based control, feedback linearization. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hou + 4% vacatio pay x 6 hours | dergraduates/ta/ by June 27, 2018. If during the application |
| Department of Electrical and Computer Engineering | St. George | ECE472H1F | Engineering Economic Analysis and Entrepreneurship | 124 | Teaching Assistant | 2 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Advanced knowledge of economic evaluation and justification of engineering projects and investments - financial industry economic experience is highly desireable | /laboratory | May 31, 2018 | June 27, 2018 | \$44.44 per hou + 4% vacatio pay x 60 hours | dergraduates/ta/ by June 27, 2018. If during the application |
| Department of Electrical and Computer Engineering | St. George | ECE514H1F | Power Electronics: Converter Topologies | 39 | Teaching Assistant | 1 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise with power electronics converters utilized in applications ranging from low-power mobile devices to high-power utility systems | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hou + 4% vacatio pay x 6 hours | dergraduates/ta/ by June 27, 2018. If during the application |

| Department of Electrical and Computer Engineering | St. George | ECE537H1F | Random Processes | 39 | Teaching Assistant | 1 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expert knowledge of principles and properties of random processes as applied to communications, control systems and computer science | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hou + 4% vacatio pay x 6 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application |
|--|---------------|------------|--------------------------|----|--------------------|---|----|------------------------------|--|--|--|--------------|---------------|---|---|
| Department of Electrical and Computer Engineering | St. George | ECE552H1F | Computer Architecture | 88 | Teaching Assistant | 1 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | simulators (e.g., Simics, | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hou + 4% vacatio pay x 6 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application |
| Department of Electrical and Computer Engineering | St. George | ECE557H1F | Systems Control | 20 | Teaching Assistant | 1 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Applicants should have expert knowledge in linear control theory, state space theory, signals and systems and complex analysis. Also refer to the Course description for other required knowledge. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hou + 4% vacatio pay x 6 hours | resume - instructions and link are posted on the ECE TA web page - |
| Department of Electrical and Computer Engineering | St. George | ECE568H1 F | Computer Security | 89 | Teaching Assistant | 1 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hou + 4% vacatio pay x 6 hours | require accommodation due to a disability, please contact Jayne Leake at |

| Licca icai ana | St. George | MAT290H1F | Advanced Eng ineering Mathematics | 326 | Teaching Assistant | 3 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Knowledge of engineering mathematics with emphasis on complex variables and ordinary differential equations | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hou + 4% vacation pay x 60 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application |
|--|---------------|-----------|---|-----|--------------------|----|----|--------------------------------|--|---|--|--------------|---------------|---|---|
| Department of Electrical and Computer Engineering | St. George | MAT291H1F | Calculus III | 331 | Teaching Assistant | 3 | 60 | Sept 4, 2018 to Dec 31, 2018 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Advanced calculus knowledge - see course description | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$44.44 per hou + 4% vacatior pay x 60 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application |
| Department of Electrical and Computer Engineering | St. George | APS105H1S | omputer Fundamenta | 414 | Teaching Assistant | 10 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expert knowledge of C programming language and computer systems and problem solving using computers; the representation of information, programming techniques, programming style, basic loop structures, functions, arrays, strings, pointer-based data structures and searching and sorting algorithms. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.33 per hou + 4% vacation pay x 60 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application |
| Department of Electrical and Computer Engineering | St. George | ECE101H1S | Seminar Course: Introduction to Electrical and Computer Engineering | 224 | Teaching Assistant | 1 | 10 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Fundamental knowledge of Electrical and Computer Engineering | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.33 per hou + 4% vacatior pay x 10 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application |

| | St. George | ECE110H1S | Electrical Fundamentals | 624 | Teaching Assistant | 15 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Proficient knowledge in the physics of electricity and magnetism and circuit analysis. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.3: per hot + 4% vacatic pay x 6 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you |
|--|---------------|-----------|--------------------------------------|-----|--------------------|----|----|--------------------------------|--|---|--|--------------|---------------|---|---|
| | St. George | ECE159H1S | Fundamentals of Electric Circuits | 217 | Teaching Assistant | 5 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expert knowledge of DC linear circuit elements and analysis, transient response of linear circuits, AC power circuits | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.3: per hoi + 4% vacatic pay x 6 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you |
| Department of Electrical and Computer Engineering | St. George | ECE216H1S | Signals and Systems | 337 | Teaching Assistant | 8 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in Fundamental discrete- and continuous-time signals, definition and properties of systems, linearity and time invariance, convolution, impulse response, differential and difference equations, Fourier analysis, sampling and aliasing, applications in communications. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.3: per hoi + 4% vacatic pay x 6 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you |
| Department of Electrical and Computer Engineering | St. George | ECE221H1S | Electric and Magnetic Fields | 327 | Teaching Assistant | 6 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in electric and magnetic fundamental laws - see course outline | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.3: per hot + 4% vacatic pay x 6 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you |

| Department of Electrical and Computer Engineering | St. George | ECE231H1S | Introductory Electronics | 333 | Teaching Assistant | 6 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.2 per hc + 49 vacati pay x hour | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you |
|--|---------------|-----------|-----------------------------|-----|--------------------|----|----|--------------------------------|--|---|--|--------------|---------------|---|---|
| Department of Electrical and Computer Engineering | St. George | ECE243H1S | Computer Organization | 333 | Teaching Assistant | 16 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expert knowledge of the design of central processing unit, hardwired and microprogrammed control. Input-output and the use of interrupts. Arithmetic circuits. Assembly language programming. Main memory organization. Peripherals and interfacing. Microprocessors. System design considerations. The laboratory will consist of experiments involving logic systems and microprocessors. Design activity constitutes a major portion of laboratory work. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.3 per ho + 49 vacati pay x hour | disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
| Department of Electrical and Computer Engineering | St. George | ECE259H1S | Electromagnetism | 158 | Teaching Assistant | 4 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in the following: fundamental laws of electromagnetics including Coulomb's law, Gauss' law, Poisson's and Laplace's equations, the Biot-Savart's law, Faraday's law, and Maxwell's equations; Vector calculus as applied to determine the relationship between the electric and magnetic fields and their sources (charges and currents); polarization in dielectric materials and magnetic materials; circuit elements such as the resistor, capacitor and inductor. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.3 per ho + 4% vacati pay x hour | disability, please contact Jayne Leake at jayne.leake@utoronto.ca |

| Department of Electrical and Computer Engineering | St. George | ECE297H1S | Communication and Design | 326 | Teaching Assistant | 15 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in electrical and computer engineering design processes illustrated by the design and implementation of software systems. Proficiency in C programming is mandatory for this course. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.33 per hour + 4% vacation pay x 60 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
|--|---------------|-----------|---------------------------------|-----|--------------------|----|----|--------------------------------|--|---|--|--------------|---------------|--|---|
| Department of Electrical and Computer Engineering | St. George | ECE302H1S | Probability and Applications | 56 | Teaching Assistant | 2 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Strong math and probabilty background is required. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.33 per hour + 4% vacation pay x 60 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
| Department of Electrical and Computer Engineering | St. George | ECE311H1S | Dynamic Systems and Control | 113 | Teaching Assistant | 2 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Applicants should have expert knowledge in linear control theory, state space theory, signals and systems and complex analysis. Also refer to the Course description for other required knowledge. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.33 per hour + 4% vacation pay x 60 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
| | St. George | ECE316H1S | Communication Systems | 96 | Teaching Assistant | 2 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Applicants must have in depth knowledge of key concepts in digital and analog communication theory, signals and systems. Operational knowledge of signal generators, oscilloscopes, spectrum analyzers is required. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.33 per hour + 4% vacation pay x 60 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you consists accommodating due to a |

| Department of Electrical and Computer Engineering | St. George | ECE318H1S | Fundamentals of Optics | 111 | Teaching Assistant | 2 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expert knowledge of Geometric Optics: Spherical surfaces, lenses and mirrors, optical imaging systems, matrix method, and aberrations; Polarization: Polarizer and polarizations, anisotropic materials, dichroism, birefringence, index ellipsoid, waveplates, optical activity, Faraday effect; Interference: superposition of waves, longitudinal and transverse coherence, Young's double-slit experiment, Michelson and Fabry-Perot interferometer, thinfilms. Must know Diffraction and Fourier Optics: diffraction theory, single and double slits, diffraction gratings, spatial filtering, basic optical signal processing. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | , | \$45.33 per hour + 4% vacation pay x 60 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
|--|---------------|-----------|---|-----|--------------------|---|----|--------------------------------|--|--|--|--------------|---------------|---|--|---|
| Department of Electrical and Computer Engineering | St. George | ECE330H1S | Quantum and Semiconductor Physics | 19 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | In-depth knowledge required of the following: wave and quantum mechanics, the Schrodinger equation, quantum wells and density of states. Quantum statistics, solid-state bonding and crystal structure. Electron waves, dispersion relation inside periodic media, Fermi level and energy bands. Physical understanding of semiconductors at equilibrium, intrinsic and extrinsic semiconductors and excess carriers. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | , | \$45.33 per hour + 4% vacation pay x 30 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
| Department of Electrical and Computer Engineering | St. George | ECE334H1S | Digital Electronics | 118 | Teaching Assistant | 3 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in digital design techniques for intergrated circuits with emphasis on logic gates design at the transistor level | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | | \$45.33 per hour + 4% vacation pay x 60 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |

| Department of Electrical and Computer Engineering | St. George | ECE342H1S | Computer Hardware | 87 | Teaching Assistant | 3 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.33 per hou + 4% vacatio pay x 6 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application |
|--|---------------|-----------|-------------------------------------|-----|--------------------|---|----|--------------------------------|--|--|--|--------------|---------------|---|--|
| Department of Electrical and Computer Engineering | St. George | ECE344H1S | Operating Systems | 116 | Teaching Assistant | 3 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Applicants must be well versed in operating system structures, concurrency, synchronization, deadlock, CPU scheduling, memory management and file systems. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.33 per hou + 4% vacatio pay x 6 hours | r resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un |
| Department of Electrical and Computer Engineering | St. George | ECE345H1S | Algorithms and Data Structures | 45 | Teaching Assistant | 2 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in design and analysis of algorithms and data structures. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.33 per hou + 4% vacatio pay x 6 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/fa/ by June 27, 2018. If during the application and/or selection process you |
| Department of Electrical and Computer Engineering | St. George | ECE350H1S | Semiconductor Electronic Devices | 18 | Teaching Assistant | 2 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in the area of semiconductors, semiconductors in equilibrium, transport of carriers, p-n diodes, metal-semiconductor contacts, bipolar junction transistors, metal-oxide-semiconductor (MOS) capacitors, and MOS field effect transistors. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.33 per hou + 4% vacatio pay x 3 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application |
| Department of Electrical and Computer Engineering | St. George | ECE353H1S | Systems Software | 83 | Teaching Assistant | 2 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Advanced knowledge of operating system structure, processes, threads, synchronization, CPU scheduling, memory management, file systems, input/output, multiple processor systems, virtualization, protection, and security. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.33 per hou + 4% vacatio pay x 6 hours | are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, |

| | St. George | ECE354H1S | Electronic Circuits | 40 | Teaching Assistant | 2 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Advanced knowledge of analog and digital electronic circuits, singlestage amplifiers, current mirrors, cascode amplifiers and differential pairs; amplifier frequency response, feedback and stability and Digital CMOS logic circuits. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.3: per hot + 4% vacatic pay x 6 hours | are posted on the ECE TA web page - https://www.ece.utoronto.ca/un |
|--|---------------|-----------|-------------------------------|----|--------------------|---|----|--------------------------------|--|---|--|--------------|---------------|---|---|
| Department of Electrical and Computer Engineering | St. George | ECE356H1S | Linear Systems and Control | 53 | Teaching Assistant | 2 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in dynamic systems and their control, differential equation models of physical systems using transfer functions and state space models; linearization, nitial and input response; Stability theory, Principle of feedback, Internal Model Principle, Frequencey response, Nyquist stability. Loop shaping theory. Must know computer aided design using MATLAB and Simulink. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.3: per hot + 4% vacatio pay x 6 hours | 2018. If during the application and/or selection process you require accommodation due to a |
| | St. George | ECE357H1S | Electromagnetic Fields | 28 | Teaching Assistant | 1 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of the_Registrar/Timetables.ht m | Firm knowledge of transmission line theory: voltage and current waves, characteristic impedance, reflections from the load and source, transients on the line, Smith's chart, impedance matching. Fundamentals of electromagnetic theory: Maxwell's equations, Helmholtz's theorem, time retarded scalar and vector potentials, gauges, boundary conditions, electric and magnetic fields wave equations and their solutions in lossless and lossy medium. Plane wave propagation, reflection and transmission at boundaries. Constitutive relations and dispersion. Radiating dipole and waveguides. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.3: per hot + 4% vacatio pay x 6 hours | r jayne.leake@utoronto.ca |

| Department of Electrical and Computer Engineering | St. George | ECE358H1S | Foundations of Computing | 44 | Teaching Assistant | 2 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Applicants must be well versed in the fundamentals of algorithm design and computational complexity, including: analysis of algorithms, graph algorithms, divide-and-conquer, dynamic programming, network flow, approximation algorithms, the theory of NP-completeness, and various NP-complete problems. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45 per h + 4 vaca pay n hou | dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a |
|--|---------------|-----------|-----------------------------|-----|--------------------|---|----|--------------------------------|--|--|--|--------------|---------------|--|---|
| Department of Electrical and Computer Engineering | St. George | ECE361H1S | Computer Networks I | 190 | Teaching Assistant | 3 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Excellent programming skills in Java and C++ | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45 per h + 4 vaca pay s hou | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you |
| Department of Electrical and Computer Engineering | St. George | ECE363H1S | Communication Systems | 34 | Teaching Assistant | 2 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of the_Registrar/Timetables.ht m | Strong knowledge of analog and digital communication systems. Analog and digital signals. Probability and random processes. Energy and power spectral densities; bandwidth. Distortionless analog communication; amplitude, frequency and phase modulation systems; frequency division multiplexing. Sampling, quantization and pulse code modulation (PCM). Baseband digital communication; intersymbol interference (IST); Nyquist's ISI criterion; eye diagrams. Passband digital communications; amplitude-, phase- and frequency-shift keying; signal constellations. Performance analysis of analog modulation schemes in the presence of noise. Performance analysis of PCM in noise. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45 per h + 4 vaca pay i hou | our % ion 60 |

| Department of Electrical and Computer Engineering | St. George | ECE368H1S | Probabilistic Reasoning | ТВА | Teaching Assistant | 1 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | TAs for this course must have a trong background in stochastic processes, probabilistic graphical models, and statistical learning theory. Strong programming skills. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.33 per hou + 4% vacatio pay x 6 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you |
|--|---------------|-----------|---|-----|--------------------|---|----|--------------------------------|--|--|--|--------------|---------------|---|---|
| Department of Electrical and Computer Engineering | St. George | ECE411H1S | Real-Time Computer Control | 26 | Teaching Assistant | 2 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | In depth knowledge of digital control analysis and design by state-space methods; scheduling of control tasks using fixed-priority protocols; control design using MATLAB and Simulink, and computer control of the inverted pendulum using a PC with real-time software. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.33 per hou + 4% vacatio pay x 6 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at |
| Department of Electrical and Computer Engineering | St. George | ECE412H1S | Analog Signal Processing Circuits | 13 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in analog signal processing in both continuous-time and discrete-time; analog signal specifications; the design of analog filters including transfer function aproximation using Matlab and implementation using active-RC, transconductance-C, and switched capacitor circuits: phase locked loops. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.33 per hou + 4% vacatio pay x 3 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you |
| Department of Electrical and Computer Engineering | St. George | ECE413H1S | Energy Systems and Distributed Generation | 37 | Teaching Assistant | 2 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Prospective TAs must have knowledge of three-phase systems; steady-state transmission line model; symmetrical three-phase faults; power system stability; symmetrical components; unsymmetrical faults and fault current calculation; distribution network; equivalent steady-state model of voltage-sourced converter; distributed energy resources (DR); distributed energy storage; interface between DR and power system | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.33 per hou + 4% vacatio pay x 6 hours | and/or selection process you require accommodation due to a disability, please contact Jayne Leake at |

| | | | | | | | | | TBA - | Design issues in | Duties may include | May 31, 2018 | June 27, 2018 | | Complete the Electrical and |
|----------------|--------|-----------|---------------------|-----|----------------------|----|----|--------------------------------|-------------------------------|---|--|--------------|---------------|----------|---|
| | | | | | | | | | http://www.undergrad.engin | distributed systems: | conducting tutorials | | | | Computer Engineering on-line |
| | | | | | | | | | eering.utoronto.ca/Office_of_ | heterogeneity, security, | /laboratory | | | | TA application and add teaching |
| | | | | | | | | | the_Registrar/Timetables.ht | transparency, | demonstrations and | | | | resume - instructions and link |
| | | | | | | | | | m | concurrency, fault- | marking | | | | are posted on the ECE TA web |
| | | | | | | | | | | tolerance; networking | tutorial/laboratory | | | | page - |
| | | | | | | | | | | principles; request-reply | work, problem sets, | | | | https://www.ece.utoronto.ca/un |
| | | | | | | | | | | protocol; remote | tests and | | | | dergraduates/ta/ by June 27, |
| | | | | | | | | | | procedure calls; | examinations. | | | | 2018. If during the application |
| | | | | | | | | | | distributed objects; | | | | | and/or selection process you |
| | | | | | | | | | | middleware | | | | \$45.33 | require accommodation due to a |
| Department of | | | | | | | | | | architectures; CORBA; | | | | per hour | disability, please contact Jayne |
| Electrical and | | ECE419H1S | Distributed Systems | 81 | Teaching Assistant | 2 | 60 | Jan. 7, 2019 to April 30, 2019 | | security and | | | | + 4% | Leake at |
| Computer | George | LCLTISHIS | Distributed Systems | 01 | reactility Assistant | 2 | 00 | Jan. 7, 2019 to April 30, 2019 | | authentication protocols; | | | | vacation | jayne.leake@utoronto.ca |
| Engineering | | | | | | | | | | distributed file systems; | | | | pay x 60 | |
| | | | | | | | | | | name services; global | | | | hours | |
| | | | | | | | | | | states in distributed | | | | | |
| | | | | | | | | | | systems; coordination | | | | | |
| | | | | | | | | | | and agreement; | | | | | |
| | | | | | | | | | | transactions and | | | | | |
| | | | | | | | | | | concurrency control; | | | | | |
| | | | | | | | | | | distributed transactions; | | | | | |
| | | | | | | | | | | replication. | | | | | |
| | | | | | | | | | | , | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | TBA - | Formation in securional in | Dubine men in alude | May 21 2010 | June 27, 2018 | | Complete the Electrical and |
| | | | | | | | | | http://www.undergrad.engin | Expertise is required in Squared error and the | Duties may include conducting tutorials | May 31, 2018 | June 27, 2018 | | Complete the Electrical and Computer Engineering on-line |
| | | | | | | | | | eering.utoronto.ca/Office_of_ | | /laboratory | | | | TA application and add teaching |
| | | | | | | | | | the_Registrar/Timetables.ht | distribution, Maximum | demonstrations and | | | | resume - instructions and link |
| | | | | | | | | | m | | | | | | |
| | | | | | | | | | m | likelihood estimation, | marking | | | | are posted on the ECE TA web |
| | | | | | | | | | | Logistic regression, | tutorial/laboratory work, problem sets, | | | | page - |
| | | | | | | | | | | neural networks, radial | tests and | | | | https://www.ece.utoronto.ca/un |
| | | | | | | | | | | basis function networks. | | | | | dergraduates/ta/ by June 27, |
| | | | | | | | | | | Must also know Occam's | examinations. | | | | 2018. If during the application |
| | | | | | | | | | | razor, validation, | | | | | and/or selection process you |
| | | | | | | | | | | bagging, Bayesian | | | | | require accommodation due to a |
| | | | | | | | | | | techniques. Auto- | | | | | disability, please contact Jayne |
| | | | | | | | | | | encoders, principal | | | | | Leake at |
| | | | | | | | | | | components analysis, | | | | \$45.33 | jayne.leake@utoronto.ca |
| Department of | | | Inference | | | | | | | clustering, the EM | | | | per hour | |
| Electrical and | | ECE421H1S | Algorithms and | 217 | Teaching Assistant | 10 | 60 | Jan. 7, 2019 to April 30, 2019 | | algorithm; matrix | | | | + 4% | |
| Computer | George | | Machine Learning | | | | | , 2020 10 1 4 20, 2020 | | factorization, Markov | | | | vacation | |
| Engineering | | | | | | 1 | | | | models, hidden Markov | | | | pay x 60 | |
| | | | | | | 1 | | | | models, the forward- | | | | hours | |
| | | | | | | İ | | | | backward algorithm, the | | | | | |
| | | | | | | 1 | | | | Viterbi algorithm. Must | | | | | |
| | | | | | | 1 | | | | know Factor graphs, | | | | | |
| | | | | | | 1 | | | | Bayesian networks, | | | | | |
| | | | | | | 1 | | | | variable elimination, the | | | | | |
| | | | | | | 1 | | | | sum-product algorithm, | | | | | |
| | | | | | | 1 | | | | the max-product | | | | | |
| | | | | | | 1 | | | | algorithm; Estimating | | | | | |
| | | | | | | 1 | | | | graphical models; | | | | | |
| | | | | | | 1 | | | | Applications to image | | | | | |
| | | | | | | 1 | | | | classification, image | | | | | |
| | | | | | | | | | | processing, object | | | | | |
| | | | | | | | | | | tracking, speech | | | | | |

| Department of Electrical and Computer Engineering | St. George | ECE422H1S | Radio and Microwave Wireless Systems | 11 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in the analysis and design of systems employing radio waves, covering both the underlying electromagnetics and the overall system performance aspects such as signal-to-noise ratios: Transmission/reception phenomena; Propagation phenomena; receiver design aspects include: receiver figures of merit, noise in cascaded systems, noise figure, and noise temperature. Must undestand system examples such as fixed wireless access; mobile and personal | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | r F | \$45.33 per hour + 4% vacation pay x 30 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
|--|---------------|-----------|--|----|--------------------|---|----|--------------------------------|--|--|--|--------------|---------------|--------|--|---|
| Department of Electrical and Computer Engineering | | ECE437H1S | VLSI Technology | 10 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of the_Registrar/Timetables.ht m | communication systems; wireless cellular concepts; satellite communications: radar: Knowledge of CAD tools and design methodology for the development of advanced semiconductor devices and integrated circuits will be introduced in the laboratory environment. These include the simulation of device fabrication, device characteristics, device modeling, circuit layout and design verification. Finally, advanced technology such as GaN HEMTs, graphene devices, carbon nanotube devices, power devices, heterojunctions, InP and GaSb HBTs. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | , r | \$45.33 per hour + 4% vacation pay x 30 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |

| Department of Electrical and Computer Engineering | St. George | ECE448H1S | Biocomputation | 23 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Applicants should have a strong understanding of molecular and cellular biology; knowledge of dynamic programming algorithms and pattern finding approaches (e.g. neural networks and markov models) | Duties may include attending weekly 2 hour tutorial; solving problem sets during the tutorial; design quiz questions and administer quizzes during the tutorial; mark quizzes and invigilate the midterm during the tutorial | May 31, 2018 | June 27, 2018 | \$45.3 per ho + 4% vacati pay x 3 hours | disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
|--|---------------|-----------|--------------------|----|--------------------|---|----|--------------------------------|--|--|--|--------------|---------------|--|---|
| Department of Electrical and Computer Engineering | St. George | ECE462H1S | Multimedia Systems | 23 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in sampling and discrete-time signals in one or more dimensions - see Course description for reference | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.3 per ho + 4% vacati pay x 3 hours | 2018. If during the application and/or selection process you require accommodation due to a |
| Department of Electrical and Computer Engineering | St. George | ECE463H1S | Electric Drives | 37 | Teaching Assistant | 2 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in electro- mechanical mechanisms for force and torque production in rotating machines. DC machine theory and DC machine dynamics, synchronous machines and their dynamics, stepper motors. Introduction to space vectors and vector control of AC machines; steady state and variable speed operation of the induction machine via V/f control. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.3 per ho + 4% vacati pay x 6 hours | dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a |

| Department of Electrical and Computer Engineering | St. George | ECE464H1S | Wireless Communication | 15 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in radio medium, radio communication systems; Link budget: cable losses, propagation loss, antenna gains; Basic concepts of propagation: path loss, multi-path propagation and fading. Raleigh and Rician fading models, Doppler shift, delay spread, coherence time and coherence bandwidth of the channel; Analog modulation schemes and their bandwidths. Digital modulation schemes and their bandwidths and bit rates: BPSK, QPSK, MSK, GMSK. Basic concepts of speech coding. Error correction coding, interleaving, and multiple access frame structure; the physical layer description of the AMPS, IS-54, and GSM cellular systems. The cellular concept: frequency re- | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45. per h + 4 vacai pay y hou | our % ion 30 |
|--|---------------|-----------|---------------------------|----|--------------------|---|----|--------------------------------|--|--|--|--------------|---------------|--|---|
| Department of Electrical and Computer Engineering | St. George | ECE466H1S | Computer Networks | 53 | Teaching Assistant | 2 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | concept: frequency re- use, re-use cluster concept. Channel Expertise in traffic modeling; network calculus; traffic classification; traffic regulation; shaping, filtering, policing, leaky bucket; queueing systems; scheduling; quality of service: Diffserv and IntServ/RSVP; multi- protocol label switching; call admission control / congestion control; switching; pricing; optical networks. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | per h + 4 vaca | 2018. If during the application and/or selection process you require accommodation due to a |

| Department of Electrical and Computer Engineering | St. George | ECE469H1S | Optical Communications and Networks | 40 | Teaching Assistant | 2 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in optical communication systems and networks at the system and functional level; applications of telecommunication networks (short to long haul) to computing networks (chip-to-chip, on chip communications, optical backplanes). Thorough understanding of basic principles of optical transmission and associated components used for transmission of light and optical networks; system design tools for optical links; multi-service system requirements; optical network design tools (routing and wavelength assignment), network management and survivability. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | pe H va pa | :45.33 er hour + 4% ccation ay x 30 hours | ja/neneane@acoroncorea |
|--|---------------|-----------|---|-----|--------------------|---|----|--------------------------------|--|---|--|--------------|---------------|---------------------|--|---|
| | St. George | ECE470H1S | Robot Modelling and Control | 62 | Teaching Assistant | 3 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in robot manipulators, kinematic modeling, forward and inverse kinematics, velocity kinematics, path planning, point-to-point trajectory planning, dynamic modeling, Euler- Langrange equations, inverse dynamics, joint control, computed torque control, passivity-based control, feedback linearization. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | pe d va pa | 45.33 er hour + 4% acation ay x 60 hours | dergraduates/ta/ by June 27, 2018. If during the application |
| Department of Electrical and Computer Engineering | St. George | ECE472H1S | Engineering Economic Analysis and Entrepreneurship | 213 | Teaching Assistant | 3 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Advanced knowledge of economic evaluation and justification of engineering projects and investments - financial industry economic experience is highly desireable | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | pe + va pa | 45.33 er hour + 4% ecation ay x 60 hours | |

| Department of Electrical and Computer Engineering | St. George | ECE516H1S | Intelligent Image Processing | 29 | Teaching Assistant | 1 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | In depth knowledge of the field of Personal Cybernetics, including "Wearable Computing", "Personal Technologies", "Human Computer Interaction (HCI)," "Mobile Multimedia," "Augmented Reality," "Mediated Reality," "Mediated Reality," and the merging of communications devices such as portable telephones with computational and imaging devices. The focus will be on fundamental aspects and new inventions for humancomputer interaction. Must have knowledge of mediated reality, Personal Safety Devices, lifelong personal video capture, the Eye Tap principle, collinearity criterion, comparametric equations, photoquantigraphic imaging, lightvector | Duties may include conducting tutorials and laboratory demonstrations and marking laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | pe va pa | 645.33 er hour + 4% acation ay x 60 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
|--|---------------|-----------|------------------------------|----|--------------------|---|----|--------------------------------|--|---|--|--------------|---------------|----------------|---|---|
| Department of Electrical and Computer Engineering | St. George | ECE532H1S | Digital Systems Design | 36 | Teaching Assistant | 3 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | spaces, anti- Expertise in advanced digital systems design concepts including project planning, design flows, embedded processors, hardware/software interfactions, software drivers, embedded operating systems, memory interfaces, system-level timing analysis, clocking and clock domains. There is a significant design project in this course which is undertaken and implemented on an FPGA development board. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | pe va pa | \$45.33 er hour + 4% acation ay x 30 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |

| Department of Electrical and Computer Engineering | ECE533H1S | Power Electronics: Switch-Mode Power Supplies | 15 | Teaching Assistant | 1 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in the analysis, design and implementation of highefficiency switched-mode power supplies (SMPS) used in modern electronic equipment. Knowledge of isolated and nonisolated SMPS topologies; steady-state analysis; component datasheets; small-signal modeling and control of non-ideal converters; compensator design; thermal and magnetic circuits; power semiconductor devices; protection and practical implementation issues. The course includes an experimental design project, where teams design, solder and test a closed-loop dc-dc converter. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.33 per hour + 4% variables pay x 60 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |
|--|-----------|---|-----|--------------------|---|----|--------------------------------|--|---|--|--------------|---------------|---|---|
| Department of Electrical and Computer Engineering | ECE568H1S | Computer Security | 121 | Teaching Assistant | 3 | 60 | Jan. 7, 2019 to April 30, 2019 | TBA - http://www.undergrad.engin eering.utoronto.ca/Office_of_ the_Registrar/Timetables.ht m | Expertise in principles of computer systems security including understanding how attackers operate; how to identify security vulnerabilities and how they can be exploited; techniques to create secure systems and defend against such attacks. Knowledge of industry standards for conducting security audits to establish levels of security will be introduced. Knowledge of basic cryptographic techniques as well as hardware used to accelerate cryptographic operations in ATM's and webservers. | Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations. | May 31, 2018 | June 27, 2018 | \$45.33 per hour + 4% vacation pay x 60 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@utoronto.ca |

| Department of Electrical and Computer Engineering | St. George | ECE1059HS | Power System Modeling and Power Flow | 20 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Advanced knowledge of power system modeling, analysis and PSCAD & PSSE software packages | Attending tutorials, preparing mid-term and final-examination papers, preparing Lab demos | May 31, 2018 | June 27, 2018 | per + vac pay | 15.33 r hour 4% cation | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@gmail.com. Please note that some announcements of graduate course TA vacancies are tentative, pending final course determinations and enrolment and Assoc. Chair, Graduate Studies approval. |
|--|---------------|-----------|--|----|--------------------|---|----|--------------------------------|---|--|--|--------------|---------------|------------------------|---|--|
| Department of Electrical and Computer Engineering | St. George | ECE1352HF | Integrated Circuits for Digital Communications | 18 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | An M.A.Sc. or a Ph.D. student who has taken ECE1352 before is strongly preferred. Priority will be given to applicants who are active in the research related to this course. | Marking assignments, final project, and final exam | May 31, 2018 | June 27, 2018 | per + vac pay | 14.44 r hour 4% cation y x 30 ours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne |
| Department of Electrical and Computer Engineering | St. George | ECE1365HS | High Frequency Integrated Circuits | 60 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Excellent understanding of the ECE1365S course material; in depth expertise in using the following CAD tools; Cadence Analog Artist Spectre RF, Composer, Virtuoso Harmonic Balance and periodic state state simulation techniques inductor, transformer and multiport EM design and modelling using Astic and EMX SiGe BiCMOS and nanoscale RF SOI/FDSOI CMOS technology process flow, device modelling, layout and RLC parasitic layout extraction using StarRC. Excellent knowledge of STMicroelectronics and GlobalFoundries design kits and tools; VNA, NFA, spectrum analyzer testing at DC-300 GHz and on-wafer probing of devices and circuits | Development of assignments and exercises and marking of assignments and exercises and course paper | May 31, 2018 | June 27, 2018 | per + vac pay | 15.33 | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@gmail.com. Please note that some announcements of graduate course TA vacancies are tentative, pending final course determinations and enrolment and Assoc. Chair, Graduate Studies approval. |

| Department of Electrical and Computer Engineering | St. George | ECE1387HF | CAD for Digital Circuit Synthesis and Layout | 22 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | | Development of assignments and exercises and marking of assignments and exercises and course paper | May 31, 2018 | June 27, 2018 | \$44.44 per hou + 4% vacatio pay x 3 hours | r require accommodation due to a disability, please contact Jayne Leake at jayne.leake@gmail.com. Please |
|--|---------------|-----------|---|----|--------------------|---|----|--------------------------------|---|--|--|--------------|---------------|--|--|
| Department of Electrical and Computer Engineering | St. George | ECE1388HF | VLSI Design Methodology | 20 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Requirements are: having taken ECE1388H1F in the past and/or good working knowledge of Cadence CAD tools and familiarity with Synopsys. | Responsibilities include: assistance to students with CAD tools, assistance in labs and tutorials, project grading, and email support. | May 31, 2018 | June 27, 2018 | \$44.44 per hou + 4% vacatio pay x 3 hours | n https://www.ece.utoronto.ca/un degraduates/ta/ by June 27, 2018. If during the application |
| Department of Electrical and Computer Engineering | St. George | ECE1395HS | Power Semiconductor Devices and Applications | 9 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | The applicant must have in-depth knowledge on power semiconductor device designs. Proficiency in using TCAD tools on process and device simulation to analyze power devices is required. | help students to solve technical issues related to the use of the TCAD | May 31, 2018 | June 27, 2018 | \$45.33 per hou + 49% vacatio pay x 3 hours | r require accommodation due to a disability, please contact Jayne Leake at jayne.leake@gmail.com. Please |
| Department of Electrical and Computer Engineering | St. George | ECE1478HS | Lasers and Detectors | 23 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | | Grading of biweekly problem sets (5 in total) and partial grading of the final exam. Answer questions from students and provide assistance as needed. | May 31, 2018 | June 27, 2018 | \$45.33 per hou + 4% vacatio pay x 3 hours | are posted on the ECE TA web page - https://www.ece.utoronto.ca/un degraduates/ta/ by June 27, 2018. If during the application |

| Department of Electrical and Computer Engineering | ECE1501HF | Error Control Codes | 18 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Solid graduate-level understanding of algebraic coding theory and error-control coding techniques | Grading problem sets and midterm exam | | June 27, 2018 | \$44.44 per hour + 4% vacation pay x 30 hours | page - https://www.ece.utoronto.ca/un |
|--|-----------|---|----|--------------------|---|----|--------------------------------|---|---|---|--------------|---------------|--|--|
| Department of Electrical and Computer Engineering | ECE1505HF | Convex Optimization | 31 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Solid background in optimization theory, algorithms and related subjects such as numerical linear algebra. It is preferred that applicants have successfully completed this course or its equivalent. | Grading problem sets and midterm exam | May 31, 2018 | June 27, 2018 | \$44.44 per hour + 4% vacation pay x 30 hours | disability, please contact Jayne Leake at |
| Department of Electrical and Computer Engineering | ECE1512HS | Digital Image Processing and Applications | 50 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Prefer strong background in signal/image processing or computer vision. PhD preferred | The TA will mark homework sasignments, student project proposals, end of term student projects, and student in class presentations. | May 31, 2018 | June 27, 2018 | \$45.33 per hour + 4% vacation pay x 30 hours | disability, please contact Jayne Leake at |

| Department of Electrical and Computer Engineering | St. George | ECE1657HF | Game Theory and Evolutionary Games | 19 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Solid background in mathematical logic, linear algebra, systems and signals, game theory. Must have taken this course or equiv. in the past. | TA will assist the instructor with the preparation of homework, building solid problem solutions, the grading of the background in homework, projects and the exam. | May 31, 2018 | June 27, 2018 | \$44.4 per ht + 49 vacati pay x hour | require accommodation due to a disability, please contact Jayne Leake at jayne.leake@gmail.com. Please |
|--|---------------|-----------|--|-----|--------------------|---|----|--------------------------------|---|--|---|--------------|---------------|---|--|
| Department of Electrical and Computer Engineering | St. George | ECE1747HF | Parallel Programming | 42 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Applicants should have taken operating systems as an undergraduate and have superior knowledge of parallel programming. | | May 31, 2018 | June 27, 2018 | \$44.4 per hd + 4% vacati pay x hour | require accommodation due to a disability, please contact Jayne Leake at jayne.leake@gmail.com. Please |
| Department of Electrical and Computer Engineering | St. George | ECE1755HS | Parallel Computer Architecture and Programming | ~25 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Applicants should have taken ECE 552 or equivalent (Computer Architecture); Knowledge of parallel architecture; Experience with parallel programming (pthreads, MPI, etc); | The TA will assist the instructor with preparation of homework solutions, grading of homework, end of the term laboratory and project/exam. | May 31, 2018 | June 27, 2018 | \$45.3 per hd + 49 vacati pay x hour | require accommodation due to a disability, please contact Jayne Leake at jayne.leake@gmail.com. Please |

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|----------------|------------|------------|-------------------|----|--------------------|---|----|--------------------------------|------------------------------|---------------------------|-------------------------|---------------|----------------|----------|----------------------------------|
| Department of | St. George | ECE1756HF | Reconfigurable | 25 | | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - | TA should have | TA will assist in | May 31, 2018 | June 27, 2018 | | Complete the Electrical and |
| Electrical and | | | Computing and | | | | | | https://www.ece.utoronto.ca/ | significant expertise in | creation of | | | | Computer Engineering on-line |
| Computer | | | FPGA Architecture | | | | | | graduates/courses/timetable/ | both the use of FPGAs | assignments to | | | | TA application and add teaching |
| Engineering | | | | | | | | | | and the design of the | perform computation | | | | resume - instructions and link |
| | | | | | | | | | | FPGA architecture itself. | and signal processing | | | \$44.44 | |
| | | | | | | | | | | Strong HDL design skills, | on FPGAs; develop test | | | per hou | page - |
| | | | | | | | | | | and extensive knowledge | | | | + 4% | https://www.ece.utoronto.ca/un |
| | | | | | Teaching Assistant | | | | | of the Quartus II and | confirm correctness of | | | vacatio | |
| | | | | | | | | | | Model Sim CAD | student assignments; | | | pay x 30 | |
| | | | | | | | | | | environments are | create sample | | | hours | and/or selection process you |
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| | | | | | | | | | | required. | solutions, which will | | | | require accommodation due to a |
| | | | | | | | | | | | span a range of area | | | | disability, please contact Jayne |
| | | | | | | | | | | | vs. speed trade-offs; | | | | Leake at |
| | | | | | | | | | | | assist in creation of | | | | jayne.leake@gmail.com. Please |
| | | | | | | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - | A strong background and | | May 31, 2018 | June 27, 2018 | | Complete the Electrical and |
| | | | | | | | | | https://www.ece.utoronto.ca/ | academic record in | instructor by grading | | | | Computer Engineering on-line |
| | | | | | | | | | graduates/courses/timetable/ | algorithms and data | homework | | | | TA application and add teaching |
| | | | | | | | | | | structures. Being a | assignments, a | | | | resume - instructions and link |
| | | | | | | | | | | previous student of the | midterm and final | | | | are posted on the ECE TA web |
| | | | | | | | | | | course is beneficial. | exam. The TA will also | | | | page - |
| | | | | I | | | | | | 1 | prepare tutorial | | | | https://www.ece.utoronto.ca/un |
| | | | | | | | | | | | sessions to answer | | | | dergraduates/ta/ by June 27, |
| | | | | | | | | | | | student questions | | | | 2018. If during the application |
| | | | | | | | | | | | about homework | | | \$44,44 | |
| Department of | | | | | | | | | | | assignments and | | | per hou | and, or serection process you |
| Electrical and | St. | | Algorithms and | | | | | | | | | | | + 4% | disability, please contact Jayne |
| Computer | George | ECE1762HF | Data Structures | 76 | Teaching Assistant | | | | | | exams | | | vacation | |
| | George | | Data Structures | | | | | | | | | | | | |
| Engineering | | | | | | | | | | | | | | pay x 30 | J=, |
| | | | | | | | | | | | | | | hours | note that some announcements |
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| | | | | | | | | | | | | | | | graduate course TA vacancies |
| | | | | | | | | | | | | | | | are tentative, pending final |
| | | | | | | | | | | | | | | | course determinations and |
| | | | | | | | | | | | | | | | enrolment and Assoc. Chair, |
| | | | | | | | | | | | | | | | Graduate Studies approval. |
| | | | | | | | | | | | | | | | Gradate Stadies approvan |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Department of | St. | ECE1770HS | Trends in | 30 | | 1 | 30 | | TBA - | Proficient in middleware | Assist in home work | May 31, 2018 | June 27, 2018 | | Complete the Electrical and |
| Electrical and | George | LCL1770113 | Middleware | 30 | | _ | 30 | | https://www.ece.utoronto.ca/ | concepts, internet-scale | grading, project | 1107 51, 2010 | Julie 27, 2010 | | Computer Engineering on-line |
| | deorge | | | | | | | | | distributed systems | | | | | |
| Computer | | | Systems – Large- | | | | | | graduates/courses/timetable/ | | grading, organzing | | | | TA application and add teaching |
| Engineering | | | scale Data | | | | | | | concepts, recent trneds | student teams, serve | | | | resume - instructions and link |
| | | | Management | | | | | | | in middleware, and | as point of contact for | | | | are posted on the ECE TA web |
| | | | | | | | | | | socket programming | student teams, manage | | | | page - |
| | | | | I | | | | | | Ì | mailing list and online | | | | https://www.ece.utoronto.ca/un |
| | | | | | | | | | | 1 | portal, and manage | | | | dergraduates/ta/ by June 27, |
| | | | | | | | | | | 1 | course web resources | | | | 2018. If during the application |
| | | | | | | | | | | 1 | | | | \$45.33 | |
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| | | | |] | 1 . | | | | 1 | 1 | | 1 | | + 4% | disability, please contact Jayne |
| | | | | | Teaching Assistant | | | Jan. 7, 2019 to April 30, 2019 | | 1 | | | | vacation | |
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| | | | |] | | | | | 1 | 1 | | 1 | | hours | note that some announcements |
| | | | |] | | | | | 1 | 1 | | 1 | | | of |
| | | | |] | | | | | 1 | 1 | | 1 | | | graduate course TA vacancies |
| | | | | | | | | | | 1 | | | | | are tentative, pending final |
| | | | | | | | | | | 1 | | | | | course determinations and |
| | | | | | | | | | | 1 | | | | | enrolment and Assoc. Chair, |
| İ | | | | I | | | | | | Ì | | | | | Graduate Studies approval. |
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| Department of Electrical and Computer Engineering | St. George | ECE1771HF | Quality of Service | 33 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Candidate should have some background knowledge in the areas of computer networking, distributed systems, and/or cloud computing. | papers, final survey | May 31, 2018 | June 27, 2018 | \$44.4 per ho + 4% vacati pay x. hour | require accommodation due to a disability, please contact Jayne Leake at jayne.leake@gmail.com. Please |
|--|---------------|-----------|------------------------------------|----|--------------------|---|----|--------------------------------|---|--|---|--------------|---------------|--|--|
| Department of Electrical and Computer Engineering | St. George | ECE1774HF | Sensory Cybernetics | 25 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Understands material in ECE1774. Is familiar with solving neural entropy equation for various sensory inputs. Familiarity with psychophysics and evaluation of sensory function (reaction time, discrimination). Basic familiarity with detection theory and information theory. | Marking examinations and other duties as required by instructor. | May 31, 2018 | June 27, 2018 | \$44.4 per ho + 49 vacati pay x hour | require accommodation due to a disability, please contact Jayne Leake at jayne.leake@gmail.com. Please |
| Department of Electrical and Computer Engineering | St. George | ECE1779HS | Introduction to Cloud Computing | 55 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Java Web programming experience; experience with Amazon Web Services; experience with Google AppEngine | Grade assignments; monitor bulletin board; provide technical support to students | May 31, 2018 | June 27, 2018 | \$45.3 per ho + 4% vacati pay x. hour | require accommodation due to a disability, please contact Jayne Leake at jayne.leake@gmail.com. Please |

| Department of | St. | | | | | 1 | 30 | | TBA - | Knowledge about high- | Supervise and advise | May 31, 2018 | June 27, 2018 | T | Complete the Electrical and |
|--|---------------|-----------|--|----|--------------------|---|----|--------------------------------|---|---|--|--------------|---------------|--|---|
| Electrical and Computer Engineering | George | ECE1373HS | Digital Design for Systems-on-Chip | 17 | Teaching Assistant | 1 | | Jan. 7, 2019 to April 30, 2019 | https://www.ece.utoronto.ca/ graduates/courses/timetable/ | level synthesis (HLS) for digital hardware. Experience with HLS tools, especially Altera or Xilinx. Hardware design and embedded software for FPGAs. | student project groups. Grade final project demos and reports. | | | \$45.33 per hou + 4% vacatior pay x 30 hours | Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a |
| Department of Electrical and Computer Engineering | St. George | ECE1392HS | Integrated Circuits for Digital Communications | 15 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | A PhD student who has taken ECE1392 is strongly preferred. Priority will be given to applicants who are active in the research related to this course which is digital communication systems with emphasis | marking assignments, final project, and final exam. | | June 27, 2018 | \$45.33 per hou + 4% vacation pay x 3(hours | resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application |
| Department of Electrical and Computer Engineering | St. George | ECE1502HF | Information Theory | 22 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Candidates should have taken an introductory course in information theory. Prior experience TA-ing information theory a plus and prior experience as a TA a plus. | office hours, grading homeworks, making up | May 31, 2018 | June 27, 2018 | \$44.44 per hou + 4% vacation pay x 30 hours | are posted on the ECE TA web page - https://www.ece.utoronto.ca/un |
| Department of Electrical and Computer Engineering | St. George | ECE1521HS | Detection and Estimation Theory | 17 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Prefer a PhD student with experience in detection and estimation theory. Having taken ECE1521S a plus. | Overseeing tutorials and office hours and doing grading. | May 31, 2018 | June 27, 2018 | \$45.33 per hour + 4% vaacion pay x 30 hours | are posted on the ECE TA web page - https://www.ece.utoronto.ca/un degraduates/ta/ by June 27, |
| Department of Electrical and Computer Engineering | St. George | ECE1541HS | Communication Networks I | 26 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | The applicant should have very strong mathematical skills, especially in probability and stochastic processes Should have strong background in computer networks. Should have taken ECE1541 and received a high mark. Preference will be given to students registered in the PhD program. | final, project, help with the design of the exams, to be available to run tutorials | May 31, 2018 | June 27, 2018 | \$45.33 per houn + 4% vacation pay x 30 hours | require accommodation due to a disability, please contact Jayne Leake at |

| Department of Electrical and Computer Engineering | St. George | ECE1543HS | Mobile Communication Systems | 16 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | radio, packet radio networks, and indoor wireless networks. | Marking assignments/tests, other duties as per discussion with instructor. | May 31, 2018 | June 27, 2018 | \$45.33 per hour + 4% vacation pay x 30 hours | are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/fa/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne |
|--|---------------|-----------|--|----|--------------------|---|----|--------------------------------|---|---|--|--------------|---------------|--|--|
| Department of Electrical and Computer Engineering | St. George | ECE1551HS | Mobile Broadband Radio Access | 27 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Needs to have a solid understanding of wireless communications, cellular networks and communication systems, with the emphasis on OFDM/OFDMA. Additional ly, candidate needs to have strong analytical and programming skills (Matlab is a must). Knowledge of RF propagation, link budgets and 3GPP standards (HSPA, LTE) are desirable, but not necessary. A strong preference will be given to PhD candidates. | Duties include grading, holding office hours, doing problem sets | May 31, 2018 | June 27, 2018 | \$45.33 per hour + 4% vacation pay x 30 hours | require accommodation due to a disability, please contact Jayne Leake at |
| Department of Electrical and Computer Engineering | St. George | ECE1653HF | Hybrid Systems and Control Applications | 15 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | PhD student in systems control; background in particularly hybrid systems, reach control; strong mathematical abilities | Help formulate homework problems and grade homeworks; tutorial sessions | May 31, 2018 | June 27, 2018 | \$44.44 per hour + 4% vacation pay x 30 hours | require accommodation due to a disability, please contact Jayne Leake at |
| Department of Electrical and Computer Engineering | St. George | ECE1718HS | Special Topics in Computer Hardware Design: Advanced Computer Architecture | 15 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | C++/C programming. Verilog Synthesis to Custom Logic | Grade assignments. Develop/Update Assignments. | May 31, 2018 | June 27, 2018 | \$45.33 per hour + 4% vacation pay x 30 hours | page - https://www.ece.utoronto.ca/un |

| Department of Electrical and Computer Engineering | St. George | ECE1733HS | Topics in Switching Theory | 39 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | (students will submit three programming assignments written in a language of their choice), and knowledge of the switching-theory topics that are listed above. | Marking assignments; tests and exam; other duties as required. | May 31, 2018 | June 27, 2018 | \$45.33 per hour + 4% vacation pay x 30 hours | https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at |
|--|---------------|-----------|--|----|--------------------|---|----|--------------------------------|---|---|---|--------------|---------------|--|---|
| Department of Electrical and Computer Engineering | St. George | ECE1759HF | Advances in Operating Systems | 46 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Have taken ECE1759 before and/or are familiar with the material via this link - http://www.eceq.toronto. edu/~yuan/teaching/gra dOS/schedule.html; Have a solid understanding of Operating Systems; Have previously implemented an operating system | Grading, holding office hours. | May 31, 2018 | June 27, 2018 | \$44.44 per hour + 4% vacation pay x 30 hours | require accommodation due to a disability, please contact Jayne Leake at |
| Department of Electrical and Computer Engineering | St. George | ECE1778HS | Creative Applications for Mobile Devices | 66 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | TA will need expertise in mobile application development for the Android platform, and broad expertise on software development for mobile platforms. Expertise in iphone/Xcode development is also an asset. | Duties may include attending classes and answering technical questions that arise; answer student questions on a discussion board, and via email for exercises; serve as a consultant for the creation of the projects; mark the assignments and help mark the project; coordinate the use of the smartphones, and make sure they are upto-date | May 31, 2018 | June 27, 2018 | \$45.33 per hour + 4% vacation pay x 30 hours | 2018. If during the application and/or selection process you |
| Department of Electrical and Computer Engineering | St. George | ECE1781HS | Dependable Software Systems | 18 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Must have taken ECE1781 or ECE1724. PhD student is preferred. Students who doing research in the area of software systems are preferred. | Marking of project reports. | May 31, 2018 | June 27, 2018 | \$45.33 per hour + 4% vacation pay x 30 hours | https://www.ece.utoronto.ca/un |

| Department of Electrical and Computer Engineering | ECE1782HS | Programming Massively Parallel Multiprocessors & Heterogeneous Systems | 65 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Expertise in CUDA and OpenCL programming. | Grade assignments; Develop/Update Assignments. | May 31, 2018 | June 27, 2018 | \$4! per +- vac pay ho | your require accommodation due to a disability, please contact Jayne Leake at jayne.leake@gmail.com. Please |
|--|-----------|--|----|--------------------|---|----|--------------------------------|---|---|---|--------------|---------------|---------------------------------------|---|
| Department of Electrical and Computer Engineering | ECE1085HS | Power System Optimization | 25 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Applicants should be familiar with the formulation and solution of the power system operation problems identified in the course description (i.e., optimal dispatch, unit commitment, and state estimation) and have extensive experience with MATLAB programming. Statledts who have taken ECE1085 in previous semesters or have experience with YALMIP are especially encouraged to apply. PhD TA is preferred. | The main duties for this course will be grading and providing students with support for homework assignments. | May 31, 2018 | June 27, 2018 | \$4! per + vac: pay ho | your require accommodation due to a disability, please contact Jayne Leake at jayne.leake@gmail.com. Please |
| Department of Electrical and Computer Engineering | ECE1228F | Electromagnetic Theory | 25 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | ECE1228 or equivalent Aside from a graduate level knowledge of electromagnetic theory applicant must be familiar with: Principles of Dispersion Engineering Principles of periodic structures, e.g. 1DPC Asymptotic analysis Spectra decomposition Reflection and transmission through multilayers | Marking homework Marking quizzes Marking midterm exam Help with marking final exam | | June 27, 2018 | \$44 per + vacc pay ho | your require accommodation due to a disability, please contact Jayne Leake at jayne.leake@gmail.com. Please |

| Department of Electrical and Computer Engineering | | ECE1776F | Computer Security, Cryptography and Privacy | 25 | Teaching Assistant | 1 | 30 | Sept 4, 2018 to Dec 31, 2018 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | Either taken both and TA's ECE568 before and taken ECE1776 before or TA's ECE568 multiple times and taken ECE1776 before. Should be familiar with Theano and Cleverhans. | lab assignments aiding students with questions | May 31, 2018 | June 27, 2018 | | \$44.44 per hour + 4% vacation pay x 30 hours | disability, please contact Jayne |
|--|---------------|----------|---|----|--------------------|---|----|--------------------------------|---|---|--|--------------|---------------|---|--|--|
| Department of Electrical and Computer Engineering | St. George | ECE1030S | Space Vector Theory and Control | 15 | Teaching Assistant | 1 | 30 | Jan. 7, 2019 to April 30, 2019 | TBA - https://www.ece.utoronto.ca/ graduates/courses/timetable/ | PhD level student with extensive experience on control of motor drives and control of flexible AC transmission systems equipment. Experience with Linux-based real time control hardware & software. Past experience working higher voltage systems, up to at least 400V is a core requirement. | laboratory, provide technical guidance on configuration of power electornic systems and motor drives, Support coding of digital controllers for power electronic systems and motor drives. Provide | May 31, 2018 | June 27, 2018 | , | \$45.33 per hour + 4% vacation pay x 30 hours | Complete the Electrical and Computer Engineering on-line TA application and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/un dergraduates/ta/ by June 27, 2018. If during the application and/or selection process you require accommodation due to a disability, please contact Jayne Leake at jayne.leake@gmail.com. Please note that some announcements of graduate course TA vacancies are tentative, pending final course determinations and enrolment and Assoc. Chair, Graduate Studies approval. |

| | | ECE1718S | | | | | | | TBA - | | For this new course, | May 31, 2018 | June 27, 2018 | | | Complete the Electrical and |
|----------------|---------------|----------|-------------------|-----|--------------------|-----|----|--------------------------------|---------------------------------|---------------------------|------------------------|----------------|---------------|---|----------|----------------------------------|
| | | | | | | | | | https://www.ece.utoronto.ca/ | | the TA will be | | • | | | Computer Engineering on-line |
| | | | | | | | | | graduates/courses/timetable/ | | required to go | | | | | TA application and add teaching |
| | | | | | Teaching Assistant | t 1 | 30 | Jan. 7, 2019 to April 30, 2019 | | | through the detailed | | | | | resume - instructions and link |
| | | | | | | | | | | | course description to | | | | | are posted on the ECE TA web |
| | | | | | | | | | | | make sure that the | | | | | page - |
| | | | | | | | | | | | high-level structure | | | | | https://www.ece.utoronto.ca/un |
| | | | | | | | | | | | of the assignments is | | | | | dergraduates/ta/ by June 27, |
| | | | | | | | | | | | well-understood, and | | | | | 2018. If during the application |
| | | | | | | | | | | The applicant must | to provide feedback | | | | | and/or selection process you |
| | St. George | | | | | | | | | | | | | | | require accommodation due to a |
| | | | | | | | | | | have strong hands-on | to the instructor; In | | | | | disability, please contact Jayne |
| | | | | | | | | | | skills, such as software | | | | | | Leake at |
| | | | Hardware-Accelera | 12 | | | | | | programming as well | lab manager, make | | | | \$45.33 | jayne.leake@gmail.com. Please |
| Electrical and | | | | | | | | | | as hardware | sure that the | | | | per hour | note that some announcements |
| Computer | | | | | | | | | | development and | designated lab has all | | | | + 4% | of |
| | | | | | | | | | | verification. Familarity | hardware and | | | | vacation | graduate course TA vacancies |
| Engineering | | | | | | | | | | with dataflow | software that is | | | | pay x 30 | are tentative, pending final |
| | | | | | | | | | | programming models | necessary for the | | | | hours | course determinations and |
| | | | | | | | | | | and interfacing with | assignments; Help | | | | | enrolment and Assoc. Chair, |
| | | | | | | | | | | hardware IP's through | | | | | | Graduate Studies approval. |
| | | | | | | | | | | APIs/SDKs is a big plus | | | | | | |
| | | | | | | | | | | Al 13/30103 13 a big plas | preparation in an | | | | | |
| | | | | | | | | | | | iterative process | | | | | |
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| | | | | | | | | | | | through constant | | | | | |
| | | | | | | | | | | | provision of feedback | | | | | |
| | | | | | | | | | | | about the suggested | | | | | |
| | | | | | | | | | | | description, and | | | | | |
| | | | | | | | | | | | developing samples | | | | | |
| | | | | | | | | | | | that help to early- | | | | | |
| | | | | | | | | Sept 4, 2018 to Dec 31, 2018 | TBA - | | access the difficulty | May 31, 2018 | June 27, 2018 | | | Complete the Electrical and |
| | | | | | | | | 3cpt 1, 2010 to Dec 31, 2010 | https://www.ece.utoronto.ca/ | | | 1 ldy 51, 2010 | June 27, 2010 | | | Computer Engineering on-line |
| | | | | | | | | | graduates/courses/timetable/ | | | | | | | TA application and add teaching |
| | | | | | | | | | graduates/ courses/ arrietable/ | | | | | | | resume - instructions and link |
| | | | | | | | | | | | | | | | | are posted on the ECE TA web |
| | | | | | | | | | | | | | | | | page - |
| | | | | | | | | | | | | | | | | https://www.ece.utoronto.ca/un |
| | | | | | | | | | | The TA should have a | | | | | | dergraduates/ta/ by June 27, |
| | | | | | | | | | | solid experience using | | | | | | 2018. If during the application |
| Department | | | | | | | | | | tensorflow for doing | The TA will oversee | | | | \$44.44 | and/or selection process you |
| of Electrical | | | | | | 1 | | | | assignments involving | | | | | per hour | require accommodation due to a |
| | St. | ECE1504F | Statistical | TBA | TA | 1 | 60 | | | | | | | | + 4% | disability, please contact Jayne |
| and | George | ECE1304L | Learning | IDA | IA | 1 | 00 | | | Convolutional Neural | programming | | | | vacation | Leake at |
| Computer | 1 | | - | | | 1 | | | | network, Recurrent | assignments for the | | | | | jayne.leake@gmail.com. Please |
| Engineering | | | | | | 1 | | | | Neural Network and | course | | | | hours | note that some announcements |
| | | | | | | | | | | Reinforcement | 1 | | | | | of |
| | | | | | | | | | | Learning | | | | | | graduate course TA vacancies |
| | | | | | | | | | | | | | | | | are tentative, pending final |
| | | | | | | | | | | | | | | | | course determinations and |
| | | | | | | | | | | | | | | | | enrolment and Assoc. Chair, |
| | | | | | | | | | | | | | | | | Graduate Studies approval. |
| | | | | | | | | | | | | | | | | |
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| 1 | 1 |] | | | 1 | 1 | | | 1 | | I | | | 1 | | |