Queen's University
ENGINEERING
Electrical and
Computer Engineering

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JOB: ELEC390 COURSE DEVELOPMENT

On behalf of the Electrical and Computer Engineering (ECE) program, the Faculty of Engineering and Applied Science will be hiring one student this Summer for the development and setup of ELEC 390: Principles of Design and Development. Under the direction of the ECE Undergraduate Curriculum Subcommittee (UCS) on Artificial Intelligence (AI) and Machine Learning (ML), the course content for ELEC 390 will be shifting towards new core content that focusses on AI and ML. As such, a course developer is required to assist with the development of new course content that meets these objectives. Currently, the plan is to base the course on DuckieTown (www.duckietown.org), a hardware, software, and teaching platform for delivering robotics and AI learning experiences for an autonomous driving application.

The successful candidate will:

- Work with the course instructor to develop a curriculum and syllabus for the course,
- Acquire, prototype, and test hardware, and make recommendations as to their suitability for the course,
- Help make decisions regarding the logistics and structure of the course, and
- Develop a series of labs, based on DuckieTown, that will apply AI/ML topics to an autonomous driving situation.

Successful candidate will be:

- A full-time graduate student, in the ECE program or related engineering program.
- Graduate Students must have permission of their Supervisor to take on this position.

Successful candidates will have:

- Sound understanding of core concepts in engineering design and problem solving,
- Hands-on skills in the electrical and/or computer engineering fields,
- Proven ability to work independently, and
- Initiative and creativity

Experience in the following areas would be considered an asset:

- Experience with machine vision, AI and ML techniquesExperience with mobile robotics and Robot Operating System (ROS)
- Ability to code in Python

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If you are interested, please submit a brief cover letter, unofficial transcript, and your resume by **May 31st at 4:00 pm** to mary.gillespie @queensu.ca . The position will be casual part-time a maximum of 84 hours during this period hours (May 29, 2023, through August31, 2023) at $25/hour + vacation pay. You must be eligible to work in Canada.
Please follow this link for more info on the ELEC390 program:
https://www.ece.queensu.ca/undergraduate/courses/elec-390.html

We appreciate all applications, but only successful candidates will be contacted.

http://www.ece.queensu.ca