

Undergraduate / Graduate Research Assistant Position

Description

The Electromagnetic Vision (EMVi) Research Laboratory at the Dept. of Electrical and Computer Engineering is looking to hire a research assistant (RA) for a software application in radar control. Graphical user interface (GUI) is needed to display real-time waveforms received from a Field-Programmable Gate Array (FPGA) embedded in a radar system. The applicant will also assist in integration and testing of the radar system, which aims at detecting concealed weapons under clothing.

The position will begin part-time during the term and will transition into a full-time summer RA starting May 1st. The successful candidate, if an undergraduate student, will be expected to apply for the NSERC Undergraduate Student Research Award (USRA). (<u>NSERC USRA Website</u>)

Key Qualification:

- Experience in C, Python and MATLAB programming languages.
- GPA of at least "B" (8 or higher, 73%-76% or higher).
- Windows and Linux software application development, knowledge of Windows and Linux environments.
- Understanding of GUI development, preferably in Python 3.x.
- Current undergraduate or graduate studies in Electrical or Computer or Software Engineering or Computer Science.
- Candidates from the Bachelor of Technology program will also be considered.

Preference will be given to candidates with experience in:

- Communication protocols (TCP/IP, SPI, UART, USB)
- Embedded systems and FPGAs
- Linux and real-time operating systems (RTOS).
- RF and Microwaves or Radars or Antennas

Send your resume and unofficial transcripts to

Prof. Natalia Nikolova (<u>nikolova@ieee.org</u>) and Aaron Pitcher (<u>pitchea@mcmaster.ca</u>) Subject: Application for RA Position

The deadline for applying is 11:59 pm, February 15th, 2018.