

Greg d'Eon

350 Columbia St. West unit 342 • Waterloo, ON • N2L 6P8
(902) 293-9255 • greg.deon@uwaterloo.ca

Education

University of Waterloo Sept 2017 – Present
Master's of Mathematics
Expected graduation: April 2019

Dalhousie University Sept 2012 – December 2016
Bachelor of Computer Engineering
2014-2016: Sexton Scholar with 4.26 GPA
2012-2014: Sexton Scholar with 4.30 GPA

Work Experience

NewAE Technology Jan 2017 – Aug 2017; May 2016 – Aug 2016
Software Engineer

- Developed open-source software for the ChipWhisperer platform using Python, C, and Verilog, adding helpful features to the software and greatly increasing the breadth of the existing firmware examples.
- Wrote and revised a set of tutorials for the ChipWhisperer software, bringing the documentation up to date and increasing the value of the hardware.
- Taught in-person training courses with up to 20 students at Black Hat USA security conference

Dalhousie University Sept 2015 – Dec 2015
Research Assistant with Dr. Guy Kember

- Created an analytical model for head impacts by working from existing published papers in acoustics.
- Implemented mathematical calculations and visualizations in Matlab and Mathematica, making calculations fast and efficient.

Dalhousie University Jan 2014 – Apr 2015; May 2014 – Aug 2014
Research Assistant with Dr. Jeff Dahn

- Created an embedded system (hardware, firmware, and PC software) to emulate commercial lab equipment, providing an inexpensive method of data collection.
- Communicated effectively with graduate students and supervisors to create software with all desired features implemented.
- Designed and built a battery testing system, including a Visual Basic application and a custom sheet metal enclosure, allowing faster and more efficient data collection.
- Created an academic poster about the work and gave a talk to a small audience, including graduate students and undergraduate assistants from multiple labs.

Academic Experience

University of Waterloo

Sept 2017 – Present

Teaching/Instructional Assistant

- Led lab sessions with up to 40 students, held office hours, and marked assignments/tests
- IA duties:
 - Jan - Apr 2018: Intro to Computer Programming 2 (CS106)
 - Sept - Dec 2017: Intro to Computer Programming 1 (CS105)

Dalhousie University

Sept 2013 – December 2016

Teaching Assistant

- Led weekly two-hour tutorial sessions, teaching up to 90 students by demonstrating examples and helping individual students as needed
- Courses taught:
 - Sept - Dec 2016: C++ Programming (ENGM3282)
 - Sept - Dec 2015: C Programming (ENGM1081)
- Graded up to 120 assignments or 100 tests each week for first-, second-, and third-year math courses, providing accurate marks and helpful comments to students.
- Courses graded:
 - May - Aug 2016: Vector Calculus (ENGM2101)
 - Sept - Dec 2015: C++ Programming (ENGM3282)
 - Sept - Dec 2015: C Programming (ENGM1081)
 - Jan - Apr 2015: Differential Equations (ENGM2022)
 - Sept - Dec 2014: Vector Calculus (ENGM2101)
 - Jan - Apr 2014: Linear Algebra (ENGM1041)
 - Sept - Dec 2013: C Programming (ENGM1081)

Dalhousie University

Sept 2013 – May 2016

Private Tutor

- Tutored first- and second-year students in a variety of groups, ranging from individual tutoring to lecture-style discussions with 30 students
- Courses tutored include engineering physics, chemistry, design, and mathematics, with a heavy emphasis on Vector Calculus and Differential Equations

Awards

Scholarships

- 2017 NSERC CGS-M – \$17500
- 2017 Waterloo President’s Graduate Scholarship – \$10000
- 2016 Dalhousie In-Course Scholarship – \$2000
- 2014 John G. Bruce Scholarship – \$10000 (renewed 2015)
- 2014 Walter P. Copp Memorial Prize – \$400
- 2012 Dalhousie Entrance Scholarship – \$5000 (renewed 2013 – 2015)

Distinctions

- 2017 Dalhousie University Medal – Top Academic Standing, Computer Engineering
- 2017 IEEE Atlantic Section Medal – Top Academic Standing, Computer Engineering
- 2014 Kenneth Marginson Award – Top Academic Standing, Class of Engineering
- 2014 Bob Walter Award – Student Vote, Class of Engineering
- 2012 Governor General’s Award – Top Academic Standing, Prince Andrew High

Academic Papers

G. d’Eon and C. O’Flynn. Power Analysis and Fault Attacks against Secure CAN: How Safe Are Your Keys? To appear in *Transportation Cybersecurity and Privacy: An SAE International Journal*, 2018.

K. J. Nelson, **G. L. d’Eon**, A. T. B. Wright, L. Ma, J. Xia, and J. R. Dahn. Studies of the Effect of High Voltage on the Impedance and Cycling Performance of Li[Ni_{0.4}Mn_{0.4}Co_{0.2}]O₂/Graphite Lithium-Ion Pouch Cells. *Journal of the Electrochemical Society*, 2015, 162, A1046-A1054.

Extra-curricular Involvement

Formula SAE

Sept 2013 – May 2017

Dalhousie University

- May 2016 – May 2017: Team captain
 - Led 50+ students in a hierarchical team structure
 - Responsible as the face of the team, directing meetings with system leads, working on recruitment and sponsorships, and upkeeping the team’s social media
 - Contributed heavily to multiple areas of the team, providing technical help to the suspension system and temporarily leading the powertrain system
- Sept 2015 – April 2016: Electrical system lead
 - Led a group of 10 engineering students, managing tasks on tight deadlines
 - Used professional engineering software to design and build wiring systems for a new engine, including work on an electronic shifter
- Sept 2014 – August 2015: Electrical system member
- Sept 2013 – August 2014: Aerodynamics system member

Hobbies and Community Involvement

Running

- Avid middle- and long-distance runner (2004 – present)
- 2016 Natal Day 2 Miler: 5th place overall (11:28)
- 2015 Valley Harvest Half Marathon: 9th place overall (1:23:15)
- 2012 Nova Scotia Track & Field Provincials: 1500m bronze medalist

Music

- Drummer and singer for band *Sunday Run* (2012 – 2017)
- Played at several venues annually, including fundraisers for local elementary school, soup kitchen, and charities
- Proficient in music theory and arranging

Volunteer Work

- Volunteered as summer camp leader at Stevens Road Church (2009 – 2013)
- Led up to 50 children aged 3-12 in arts/crafts and sports at full day camp