Greg d'Eon

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Education

University of British Columbia   Sept. 2019 – present
PhD in Computer Science
Advisors: Kevin Leyton-Brown, James Wright (UAlberta)

University of Waterloo   Sept. 2017 – Aug. 2019
Master's of Mathematics (Computer Science)
Advisors: Edith Law, Kate Larson

Dalhousie University   Sept. 2012 – Dec. 2016
Bachelor of Computer Engineering

Publications

Conference Papers
Greg d'Eon and Kate Larson. "Testing Axioms Against Human Reward Divisions in Cooperative Games."
AAMAS 2020.

Blaine Lewis*, **Greg d'Eon***, Andy Cockburn, and Daniel Vogel. "KeyMap: Improving Keyboard Shortcut
Vocabulary Using Norman's Mapping." CHI 2020.

Johann Wentzel, **Greg d'Eon**, and Daniel Vogel. "Improving Virtual Reality Ergonomics through Reach-
Bounded Non-Linear Input Amplification." CHI 2020.

Greg d'Eon, Joslin Goh, Kate Larson, and Edith Law. "Paying Crowd Workers for Collaborative Work."
CSCW 2019.

Journal Papers
Colin O'Flynn and **Greg d'Eon**. "Power Analysis and Fault Attacks against Secure CAN: How Safe Are Your
Keys?" SAE International Journal of Transportation Cybersecurity and Privacy, 1.11-01-01-0001 (2018),
3-18.

Kathlyne Nelson, **Greg d'Eon**, Asher Wright, Lin Ma, Jian Xia, and Jeff Dahn. "Studies of the effect of high
voltage on the impedance and cycling performance of Li[Ni0.4 Mn0.4 Co0.2] O2/graphite lithium-ion pouch
cells." Journal of The Electrochemical Society, 162.6 (2015), A1046-A1054.

Peer-Reviewed Workshop Papers
Greg d'Eon, Kate Larson, and Edith Law. "The Effects of Single-Player Coalitions on Reward Divisions in
Cooperative Games." GAIW (Games, Agents, and Incentives Workshop) at AAMAS 2019.

Non-Peer-Reviewed Publications
Colin O'Flynn and **Greg d'Eon**. "I, For One, Welcome Our New Power Analysis Overlords: An Introduction
to ChipWhisperer-Lint" (white paper). Black Hat USA, 2018.

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 software features and wide range of sample firmware.
- 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 30 students at Black Hat USA.

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.

Awards

Scholarships
- 2019 NSERC CGS-D – $105,000 over 3 years
- 2019 UBC 4-Year Fellowship – $72,800 over 4 years (declined to accept NSERC)
- 2018 Ontario Graduate Scholarship – $15,000
- 2018 Waterloo President's Graduate Scholarship – $5,000
- 2017 NSERC CGS-M – $1,7500
- 2017 Waterloo President's Graduate Scholarship – $10,000
- 2014 John G. Bruce Scholarship – $10,000 (renewed 2015)
- 2012 Dalhousie Entrance Scholarship – $5,000 (renewed 2013 – 2015)

Distinctions
- 2018 Distinguished Teaching Assistantship Award – Waterloo Computer Science
- 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

Teaching Experience

University of Waterloo   Sept. 2017 – Aug. 2019
Teaching/Instructional Assistant

- Led lab sessions with up to 60 students, held office hours, and marked assignments/tests
- TA/IA duties:

  - May - Aug. 2019:   Human-Computer Interaction   (CS449)
  - Jan. - Apr. 2019:   Intro to Computer Programming 1   (CS105)
  - Sept. - Dec. 2018:   Intro to Computer Programming 1   (CS105)
  - May - Aug. 2018:   Human-Computer Interaction   (CS449)
  - Jan. - Apr. 2018:   Intro to Computer Programming 2   (CS106)
  - Sept. - Dec. 2017:   Intro to Computer Programming 1   (CS105)

Dalhousie University   Sept. 2013 – Dec. 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

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