Greg d'Eon

Vancouver, BC • greg.l.deon@gmail.com

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

Preprints

Greg d'Eon, Jason d'Eon, James R. Wright, and Kevin Leyton-Brown. "The Spotlight: A General Method for Discovering Systematic Errors in Deep Learning." ArXiv, June 2021.

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