Eric Crawford

PhD Student in Machine Learning

McGill University, Montreal, Quebec

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Education

Candidate for PhD, Computer Science — *Montreal, Quebec, Canada*

McGill University — *2014-Present*

- Cumulative GPA: 4.0/4.0
- Member of Reasoning and Learning Lab

Master of Mathematics, Computer Science — *Waterloo, Ontario, Canada*

University of Waterloo — *2012-2014*

- Cumulative GPA: 91.80%
- Member of Computational Neuroscience Research Group

Bachelor of Mathematics, Honours Computer Science, Co-op, CogSci Option — *Waterloo, Ontario, Canada*

University of Waterloo — *2007-2012*

- Cumulative GPA: 88.07%
- Dean's Honours List with Distinction

Publications

Refereed

- **Crawford, E.**, Gingerich, M., and Eliasmith, C. (2015). Biologically plausible, human-scale knowledge representation. *Cognitive science*. doi: 10.1111/cogs.12261.
- **Crawford, E.**, Gingerich, M., and Eliasmith, C. (2013). Biologically plausible, human-scale knowledge representation. In *35th Annual Conference of the Cognitive Science Society, 412-417.*

Non-refereed

- **Crawford, E.** (2015). Biologically plausible, human-scale knowledge representation. Masters of Mathematics Thesis, University of Waterloo.
- Voelker, A., **Crawford, E.**, and Eliasmith, C. Learning large-scale heteroassociative memories in spiking neurons. In *Unconventional Computation and Natural Computation. London, Ontario, 07/2014 2014.*

Software

- **Crawford, E.** (2013-Present). MPI backend for the Nengo neural simulator.
- **Crawford, E.** (2010-Present) Contributions to Nengo neural simulator core library.

Awards & Scholarships

Postgraduate Scholarship - Doctoral - $42,000, NSERC — *2016/09-2018/09*

David R. Cheriton Graduate Scholarship - $20,000, University of Waterloo, CS — *2012/09-2014/09*

Alexander Graham Bell CGS - Masters - $17,000, NSERC — *2012/09-2013/09*

President's Graduate Scholarship - $10,000, University of Waterloo, CS — *2012/09-2013/09*

Ontario Graduate Scholarship - $15,000 (Declined), Gov. of Ontario — *2012/09-2013/09*

Computational Neuroscience Summer Program - $4,000, University of Pennsylvania — *2011/05-2011/08*

Undergraduate Student Research Award - $4,500, NSERC — *2011/01-2011/05*

Undergraduate Student Research Award - $4,500, NSERC — *2010/01-2010/05*

Industrial Undergraduate Student Research Award - $4,500, NSERC — *2008/09-2009/01*

President's Scholarship - $2,000, University of Waterloo — *2007/09-2008/01*

Experience

Teaching Assistant
Montreal, Quebec, Canada

School of Computer Science, McGill University — *2014-2016*

- Implemented game-playing platform for AI course project, ran tournament between submitted agents.
- Held office hours, marked papers, gave tutorials.

Teaching Assistant
Waterloo, Ontario, Canada

Department of Computer Science, University of Waterloo — *2012-2014*

- Held office hours, marked papers, gave tutorials.

Research Assistant
Philadelphia, Pennsylvania, USA

Department of Otorhinolaryngology, University of Pennsylvania — *2011/05-2011/08*

- Implemented computational methods for identifying neural receptive fields based on neurophysiological data.

Lead Developer
Waterloo, Ontario, Canada

Computational Neuroscience Research Group, University of Waterloo — *2010/01-2010/05, 2011/01-2011/05*

- Designed and implemented GPU backend for Nengo neural simulation package.

Developer
Waterloo, Ontario, Canada

Acronym Software — *2009/05-2009/09*

- Implemented UI features for wood and masonry engineering software in C and C++.