

# Adam Atkinson

B.Math. Computer Science

aatkinson.ca

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github.com/aatkinson

## Highlights

- Software developer specialized in building deep learning products, platform, and tools.
- Interests include machine learning applied to language and sound, and semi-supervised and transfer learning.

## Work Experience

### Microsoft - A.I. & Research

*Software Development Engineer*

Montreal, QC, Canada

*Feb. 2017 - Present*

- Developing commercial language understanding, machine comprehension, and dialogue solutions.
- Developing visualization, debugging, and training tools for deep learning research and language tasks.

### Maluuba Inc. - Acquired by Microsoft in Jan. 2017

*Sales Engineer*

Waterloo, ON, Canada

*Oct. 2016 - Feb. 2017*

- Developed prototypes and proof-of-concept applications showcasing machine reading technology.
- Implemented tools and created visualizations for datasets and models produced by researchers.

### VoiceBox Technologies

*Speech Scientist, Intern*

Bellevue, WA, USA

*Sep. 2015 - Dec. 2015*

- Developed and managed audio data processing pipeline for training deep acoustic models.
- Researched and prototyped software to robustly detect voice activity in adverse environments.
- Implemented various custom signal processing, hyperparameter tuning, and model evaluation tools.

### Thalamic Labs

*Quality Assurance Engineer, Co-op*

Kitchener, ON, Canada

*Jan. 2015 - Apr. 2015*

### BlackBerry

*Test Automation Developer, Co-op*

Waterloo, ON, Canada

*Man. 2013 - Aug. 2014*

## Education

### University of Waterloo

*Bachelor of Mathematics in Computer Science, Co-op, Business Option*

Waterloo, ON, Canada

*Sep. 2011 - Aug. 2016*

*Notable Courses:* Machine Learning, Artificial Intelligence, Big Data Systems and Algorithms,  
Computational Statistics, Computer Graphics, Numerical Computation, Databases

## Personal Projects

- Generating guitar tablature from music transcriptions and raw audio using recurrent neural networks.
- Converting images of handwritten mathematical expressions to  $\text{\LaTeX}$  with varying deep neural architectures.

## Technical Skills

**Languages:** *Proficient:* C++, Python, JavaScript, Bash *Familiar:* Java, Scala, Lua, SQL

**Technologies:** Keras, TensorFlow, Theano, CNTK, NumPy, SciPy, Scikit-Learn, Pandas, Spark, Hadoop, React JS, Redux, Three.js, D3.js, WebGL, OpenGL, MySQL, MongoDB, Git, GitHub