Brian **Chen**

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Education

University of Toronto — 2015 – 2020

- HBSc. CS – Software Engineering Co-op stream
- **3x Teaching Assistant:** Introduction to Computer Science, Introduction to Software Engineering
- UofT Scholars Entrance Award and Deans List

Awards

- **1st Place** 2017 Microsoft Coding Challenge
- **4th Place** 2017 UofT The Hub Startup Challenge
- **5th Place** 2016 University of Michigan MHacks 8
- **1st Place** 2015 UofT Operations Research Challenge
- **1st Place** 2015 Marc Garneau Math Competition

Experience

DeepLearni.ng — Toronto, Canada

Machine Learning & Software Engineering Intern — **Winter 2017**

- Developed experience in full stack engineering by working with Ruby, Scala, Rails, Spark, Python, and Cassandra and React in the development of an enterprise-level machine learning platform
- Implemented Machine Learning processing modules containing logic for feed-forward neural network classification, regression, XGBoost, Random Forest, and others through usage of Tensorflow and PySpark
- Managed Kubernetes deployments, Docker images, Ansible deploy scripts, and Cypress front-end User Acceptance Testing

Trent University — Toronto, Canada

Software Engineering Intern — **Summer 2017**

- Led the development of MC^2, a collaborative math equation editing web-application created using React and MySQL
- Deployed application using Socket.io and Node.js to serve over 700 students concurrently, currently used in Trent University and the University of Toronto's Introduction to Calculus and Introduction to Statistics as the official web collaboration tool

Ivy Global — Toronto, Canada

Software Engineering Intern — **Summer 2015**

- Led the development of a New SAT test simulation and academic feedback tool by creating the backend using T-SQL, AJAX, and ASP which is now live and used by over unique 500 users monthly
- Built security measures to prevent scripting attacks and SQL injections and wrote scripts to decrease workflow redundancy

Personal Projects

Space2Vec

An extensively documented adventure into using Machine Learning for astronomy — **Winter 2017**

- Employed convolutional neural nets with backpropagation to classify transient images as supernovae, attaining accuracies upwards of 94% over 200K test images with a misdetection rate of < 3.1% and a false positive rate < 2.3%
- Worked with Jupyter Notebooks, Pandas, Keras and explored feature engineering, Random Forest and XGBoost techniques

Let Me Know

A news aggregation site - finalist in MHacks 8 and earned $3000 in seed funding — **Fall 2016**

- Implemented a web scraper in Python using Django to extract trending news articles from Twitter, Facebook, Reddit
- Generated overviews of recent events including summaries, sentiment, whitelisted readings, and media perspectives

Technical Skills

Languages/Markup: Python, C, C++, Java, Ruby, Scala, Bash, Spark, Node.js, React.js, Rails, JavaScript, HTML, CSS, ASP, SQL

Other: Jenkins, Keras, Pandas, Kubernetes, Docker, Vagrant, Ansible, Git, Amazon Web Services, Cassandra, Cypress

Extracurriculars

Computer Science Enrichment Club — University of Toronto

President, Co-Founder, ACM-ICPC Coach — **2016 – Present**

- Delivered seminars on topics such as the Blockchain, machine learning, web dev, etc. to over 400 university students
- Organized and hosted coding competitions (**UTSCode**) and hackathons (**Hack the Valley**) totaling over 1,500 participants