

# Brian Chen

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## Education

### University of Toronto

2015 – 2020

- HBS. CS – Software Engineering Co-op stream
- **3x Teaching Assistant:** Introduction to Computer Science (I & II), 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

### Salesforce

Software Engineering Intern

San Francisco, USA

Summer 2018

### DeepLearn.ing

Emerging Machine Learning Developer

Toronto, Canada

Winter 2018

- 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

Software Engineering Intern

Toronto, Canada

Summer 2017

- Led the development of MC<sup>2</sup>, 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

Software Development Intern

Toronto, Canada

Summer 2015

- Used HTML/CSS/JS and T-SQL, AJAX, ASP to develop a SAT preparation tool which is now used by over 500 users monthly
- Built security measures to prevent scripting attacks and SQL injections and wrote scripts to increase workflow efficiency

## Technical Skills

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

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

## Projects & Involvement

### Space2Vec

An extensively documented open-source adventure into using Machine Learning for astronomy

[space2vec.com](https://space2vec.com)

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 and content aggregation site - finalist in MHacks 8 and earned \$3,000 in seed funding

[letmeknow.news](https://letmeknow.news)

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

### Computer Science Enrichment Club

Official University of Toronto Scarborough CS Club - President, Co-Founder, ACM-ICPC Coach

[csec.club](https://csec.club)

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