# Brian Chen

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#### Education \_\_\_\_\_

#### **University of Toronto**

2015 - 2019

- Honors B.Sc. in Computer Science, Minor in Statistics
- 4x Teaching Assistant: Introduction to Computer
   Science (I & II), Introduction to Software Engineering

#### 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

### Experience \_\_\_

Salesforce San Francisco, USA

**Software Engineering Intern** – Salesforce Infrastructure Team

Summer 2018

- Saved teams over 60 hours weekly on build failures by creating a Jenkins build monitoring tool which tracked, triaged, and compared failures against known errors using key heuristics, automating failure detection and issue tracking workflows
- Developed dashboard using Tomcat/JSP which provided insights into build processes tracked failing tests across builds
  and jobs and correlated Jenkins events with infrastructure performance metrics to identify root causes of reoccurring issues

Dessa Toronto, Canada

Machine Learning Engineer Intern – Flagship Platform Team

Winter 2018

- Implemented various Machine Learning modules containing logic and redesigned a neural network classification pipeline using Pandas, TensorFlow and Spark resulting in up to 6x training time reduction and 10% increase accuracy performance
- Managed Kubernetes deployments, Docker images, Ansible deploy scripts/playbooks, increased test coverage of code from 64% to over 93% and also created suites of comprehensive frontend user acceptance and end to end tests using Cypress.io

Trent University Toronto, Canada

Software Engineering Intern

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 Toronto, Canada

Software Development Intern

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, Node.js, React, JavaScript, HTML, CSS, ASP, JSP, SQL Other: Jenkins, Pandas, Spark, Kubernetes, Docker, Vagrant, Ansible, Git, AWS, GCP, Cypress, Tomcat, Ant

## Projects & Involvement \_\_\_\_

**Space2Vec** – An extensively documented open-source adventure into using Machine Learning for astronomy

space2vec.com

- Employed convolutional neural nets with backpropagation to classify transient images as supernovae, attaining accuracies upwards of 94% over 200K test images (800K training) 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

etmeknow.new

- 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

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

csec.club

- Delivered seminars on topics such as CI/CD, 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