

# Brian Chen

LinkedIn [linkedin.com/in/byxchen](https://www.linkedin.com/in/byxchen) · Portfolio [byxc.me](https://byxc.me) · Email [brianyxc@gmail.com](mailto:brianyxc@gmail.com)

## Education

**University of Toronto** 2015 – 2020

- Honors B.S. in Computer Science, Minor in Statistics
- 3x 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 Database Team

Summer 2018

- Developed a Jenkins build monitoring system using Java which triaged failing builds by logging them into a PostgreSQL database and matching against known failures through heuristic analysis, automating build failure, issue tracking and bug detection workflow and saving engineering team over 60 hours/week on manual repetitive error handling
- Created dashboard using Tomcat and JSP that provided insights into CI/CD processes - tracking failing tests across builds and jobs and correlated Jenkins events with performance metrics from infrastructure in order to identify and resolve 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, Jupyter, 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](https://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

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

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

[csec.club](https://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