

# Brian Chen

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## Education

### University of Toronto

2015 – 2019

- Honors Bachelors of Science, **Computer Science**, Co-op
- 6x Teaching Assistant:** Introduction to Computer Science (I & II), Introduction to Software Engineering, Engineering of Large Software Systems

## Awards

- 1st Place** 2017 Microsoft University Coding Challenge
- 1st Place** 2015 UofT Operations Research Challenge
- 3rd Place** 2018 Facebook University Coding Challenge
- 4th Place** 2017 UofT The Hub Startup Challenge
- 5th Place** 2016 University of Michigan MHacks 8

## Experience

### Riot Games – Software Engineering Intern / Riot Platform Group

Los Angeles, Summer 2019

- Developed a mission critical application which defines data access patterns for clients to interface with over 150M records of player account data, designed for internal and third party client usage and deployed to production environment
- Automated service test, build, and deploy using Jenkins, Bazel, Docker, and provisioned AWS instances using Terraform
- Implemented rules and logic to conform to regional regulations such as EU GDPR, Korea SSN laws & China playtime limitations

### Salesforce – Software Engineering Intern / Salesforce Infrastructure Team

San Francisco, Summer 2018

- Saved teams hundreds of 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 - Machine Learning Engineer Intern / Core Platform Team

Toronto, Winter 2018

- Implemented various Machine Learning technique modules 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 frontend codebase from 64% to 93% and also created suites of frontend user acceptance and regression tests using Cypress.io

### Trent University – Research and Development Intern / Computer Science & Math Department

Toronto, Summer 2017

- Led the development of MC2, a collaborative math application created using React, Redux, MySQL, Socket.io and Node.js which is being used by 700+ students as the official tool of introductory statistics and calculus classes at Trent and UofT
- Co-authored and published a peer-reviewed [paper](#) investigating students' online mathematical communication abilities

## Technical Skills

**Languages:** C, C++, Python, Java, Kotlin, Scala, Golang, Haskell, Bash, SQL

**Web/Frameworks:** React, Redux, Angular, Node, Express, JavaScript, Protobuf, Cypress.io, ASP, JSP, MySQL, MongoDB

**Other:** Jenkins, Kubernetes, Docker, Terraform, Bazel, Ansible, Maven, Git, Tomcat, Ant, AWS

## Projects & Involvement

### Space2Vec – A documented open-source exploration into using Machine Learning for astronomy

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

- Deployed convolutional neural nets with back-propagation to classify transient images as supernovae, achieving 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 Keras, Jupyter Notebooks, Pandas, and explored feature engineering, XGBoost, and Random Forest techniques

### CS Enrichment Club – President, Co-Founder of The Official University of Toronto CS Club

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

- Developed and delivered seminars on topics such as CI/CD, blockchain, ML, web dev, etc. to over 600 university students
- Organized and hosted coding competitions ([UTSCode](#)) and hackathons ([Hack the Valley](#)) totaling over 1,500 participants

### Let Me Know – A news and content aggregation site – finalist in MHacks 8 and \$3,000+ in seed funding

- Developed a news aggregation platform dashboard using Node, Python, Django, and Angular to extract trending articles from Twitter, Reddit & Facebook APIs, then conducted sentiment analysis and summarization of events using NLP algorithms