

Brian Chen

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Education

University of Toronto

2015– 2019

- Honours Bachelors of Science, **Computer Science**, Co-op
- Teaching Assistant (8x):** Intro CS, Software Design/Engineering
- Key Courses:** Computer Graphics, Algorithms, Data Structures, HCI, Operating Systems, Comp & Network Security, Game Theory

Awards

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

Experience

Riot Games – Software Engineering Intern / Riot Platform Group

Los Angeles, Summer 2019

- Developed an application which defines and manages data access patterns for clients to interface with 100M+ records of player account data, deployed to production environment and currently in use by internal teams and external third-party clients
- Decreased service deployment time by 75% by automating test, build, and deploy using Jenkins, Bazel, Docker, and Terraform
- Adapted service logic to conform to specific 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 CI 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 incidents

Dessa - Machine Learning Engineer Intern / Core Platform Team

Toronto, Winter 2018

- Implemented various machine learning models 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
- Maintained and updated Kubernetes deployments, Docker images, Ansible 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.js, Express, JavaScript, 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

- Deployed convolutional neural nets with back-propagation to classify telescope 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%

LetMeKnow – A news and content aggregation site – finalist in MHacks 8 and \$3,000+ in seed funding

- Developed a news aggregation platform using Node, Python, Django, Angular and MongoDB to extract trending articles from Twitter, Reddit & Facebook APIs, then conducted sentiment analysis and summarization using Natural Language Processing

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

csec.club

- Coached for **ACM-ICPC** by hosting practice and lecturing on graph theory, DP, ad-hoc, and more, attaining **honorable mention**
- Led technical workshops and seminars on topics such as CI/CD, blockchain, ML, web dev & careers to over 700 members
- Organized and hosted coding competitions ([UTSCode](#)) and hackathons ([Hack the Valley](#)) totaling over 1,500 participants