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 an application which defines 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
- 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**

- 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**

- 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