Brian Chen

LinkedIn /in/byxchen · Portfolio byxc.me · Email brianyxc@gmail.com · Phone +1 (647) 781 5175

Education ____

University of Toronto

2015 - 2019

- Honours Bachelors of Science, **Computer Science**, Co-op
- 8x Teaching Assistant: Introduction to Computer Science
 (I & II), Software Design, 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 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
- 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 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 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 <u>paper</u> 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

- Utilized 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

- Responsible for managing UTSC's Computer Science Club's executive team and coordinating over 700 general members
- · Led technical workshops and delivered seminars on topics such as CI/CD, blockchain, ML, web dev, career growth, and more
- 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