Brian Chen

LinkedIn /in/byxchen · Portfolio byxc.me · Email brianyxc@gmail.com · Phone +1 (310) 866 5349

Experience_____

Riot Games - Associate Software Engineer / Player Platform Group

Los Angeles, March 2020 -

- 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 <u>paper</u> investigating students' online mathematical communication abilities

Technical Skills_____

Languages: C, C++, Python, Java, Kotlin, Golang, Bash, SQL

Web/Frameworks: React, Redux, Node.is, Express, JavaScript, TypeScript, ASP, JSP, MySQL, MongoDB

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

Education_____

University of Toronto

2015-2019

- Honours Bachelors of Science, **Computer Science**, Co-op
- TA: Intro CS, Software Design, Engineering Large Systems
- Key Courses: Computer Graphics, Algorithms and Data Structures, Human Computer Interaction, Operating Systems, Computer & 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
- All-Star 2014 American Computer Science League

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 deep-space 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, Co-Founder of University of Toronto CS Club

csec.club

- 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