Brian Chen

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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 paper investigating students' online mathematical communication abilities

Technical Skills

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

Web/Frameworks: React, Redux, Node.js, 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