



JOEL BRAUN

SOFTWARE DEVELOPER

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SKILLS

- Languages:** C, C++, Python, Javascript, Bash, Java, C#, HTML, CSS
- Frameworks:** Django, Kubernetes, OpenGL, ReactJS, JUnit, Cassandra, Maven
- Tools:** Git, CI/CD, Linux, Firebase, GCP, Docker, Azure, Jenkins, JIRA

EXPERIENCE

- OANDA - Software Developer Intern** JAN - APR 2022
 - Overhauled daily report generators in C++ to record a snapshot of every account and transaction, also improving write times and overall performance by 20%
 - Updated the main trading API from a microservices system hosted on inhouse Linux servers to allow it to transition to a Kubernetes system hosted in Google Cloud Platform
- CARFAX - Software Developer Intern** MAY - AUG 2021
 - Designed and implemented vehicle trip processing algorithm in Javascript able to detect speeding, rapid accelerations, hard brakes, and distracted behaviour in ~1 second
 - Implemented access rules to maintain compliance and security in a Firestore database
- NCR - Software Developer Intern** SEPT - DEC 2020
 - Developed a fail-tolerant payment API in Java which maps multiple cheques to multiple accounts with the option to withdraw cash within the same transaction
 - Refactored using modular programming to reduce API runtime by 30%
- NCR - Performance Test Engineer Intern** JAN - APR 2020
 - Managed and deployed 2 performance clusters with 8 nodes each using Kubernetes on GCP hosted Linux servers to run load tests
 - Automated tests, cleanup, and build updates using bash scripts for increased turnaround

PROJECTS

- Map Logging Tool - ToDoMapped** APR 2022 - PRESENT
 - ReactJS frontend using a Django Python backend to allow users to place markers on map to help the user remember places and activities they wanted to do
- Voxel Game - Blockzone** JAN - JUN 2021
 - Created an open world voxel game with C++, OpenGL, and a custom game engine
 - Designed multi-threaded, seamless chunk loading and optimized terrain rendering pipeline, resulting in drastically increased performance from 30 fps to over 200 fps
- Social Media App - uMigrate** AUG - NOV 2020
 - Developed APIs in Python using Django to handle new user registration and verification
 - Worked with a team of other students to create a social media app for university students
- Shooter Game - Yoilith** NOV 2018 - FEB 2019
 - Created a top-down shooter video game using Java with OOP principles and LibGDX

EDUCATION

- University of Waterloo** SEPT 2019 - APR 2024
 - Candidate for a Bachelor of Applied Science in Computer Engineering