Jordan Zangara

jordanozang@protonmail.com | +1 581-979-2835 | jordanozang.com

---

I am a software engineer, driven by maximizing impact, doing hard things, and constantly learning and growing. I pride myself on being a strong team player. My interests span broadly from hardware design to compilers to machine learning to JavaScript front-ends, but I feel most at home working on systems level problems and my go to language is C++. I have a long-lasting passion for mathematics. I daily drive Linux.

Work Experience

JALI Research | Aug. 2022 – Present | Toronto, ON (Remote)

Software Engineer | Feb, 2023 – Present

- Increased the product's throughput by over 100x while increasing the feature set, fault-tolerance and maintainability by re-thinking the data flow and application design to robustly exploit parallelism, eliminating many i/o operations, and operationalizing profiling and micro-benchmark tooling to detect and replace inefficient algorithms.
- Improved developer productivity and product robustness, resulting in fewer bugs shipping and a faster turnaround time on new changes, by personally writing and encouraging a culture of unit and integration testing, creating an extremely convenient logging interface that encouraged adoption to report behavior and control flow, enabling and enforcing compiler warnings, and introducing the team to sanitizers and formatting tools.
- Implemented key features for securing customers and improving renewal pricing, including custom expressions, automatic speech recognition, and improved tagging.
- Opened market opportunities by enabling robust builds to new target platforms, including Linux and OS X with minimal sustained effort. In place of the existing Visual Studio project, I implemented builds for our projects in CMake, handling dependencies robustly with vcpkg and CMake modules. I replaced various operating system specific api usages with the well-tested solutions available in the STL and Boost.

Software Development Intern | Aug, 2022 – Feb, 2023

- Prior to my promotion to Software Engineer, I conducted research and implemented papers for the detection of various audio features such as pitch (formant selection) and speech rate that were required for the animation pipeline. I also automated various code generation and obfuscation tasks that were previously being done by hand.

Skills

- Languages: C++, C, Python, SQL, Go
- Technologies: Distributed systems, Concurrency; Databases, Network Programming, Data Structures and Algorithms, Linux
- Engineering: API design, Debugging, Code review, Project and stakeholder management, Unit testing, Integration testing, Chaos Testing, Fuzz Testing
- Theory: Optimization, Linear Algebra, Calculus/Analysis, Natural Language Processing