Tejas Wilkhoo

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Education

University of Waterloo   September 2021 – April 2026 | 88.17% / 3.88 GPA

Bachelor of Computer Science, Minor in Management Studies, Specialization in Artificial Intelligence

Experience

Google - STEP Intern, Counter Abuse   Sunnyvale, CA, May 2023 – August 2023

- Launched a mechanism to programmatically identify malicious URLs hosted on Google Compute Engine VMs, yielding a 10x increase in hostile Compute Engine users addressed.
- Deployed Golang scripts on Google's primary anti-abuse platform to determine Terms of Service violations of abusive actors and to dynamically schedule takedowns based on individual user conditions.
- Developed C++ services for DNS/IP lookups and reprovisioned the existing lookup pipeline for the WHOIS service to undergo a 99.8% load decrease by redirecting traffic to a feature cache.

Google - STEP Intern, Google Kubernetes   Waterloo, ON, May 2022 – August 2022

- Contributed to an ML-based bug triaging tool that reduces SWE hours spent debugging integration and end-to-end tests by routing bugs and de-duplicating test failures.
- Engineered a feature generator that extracts test data from Google's database and processes it to be ingested by a clustering module, improving existing clustering accuracy by 21%.
- Implemented a custom Go server using Pub/Sub queues, gRPC, and Protobufs to communicate with other Google services, minimizing latency to 3700ms (75% decrease from previous) per execution.

UW Blueprint - Technical Lead   Waterloo, ON, May 2022 – April 2023

- Directed a team of 5 developers to complete a registration and management service (React, MongoDB, Stripe) for Focus on Nature, an organization that provides workshops to 20,000+ students and 146 schools in Ontario.
- Built backend (PostgreSQL, Apollo GraphQL) and frontend components for the 100+ volunteers of Sistering, an organization that provides aid to thousands of women in precarious housing situations.

Projects

Digitize: A two-player C++ game based on Stratego, built with the MVC Architecture, various design patterns for class modeling, and X11 graphics to provide a visual board representation.

Art of Motion: A C++ odometrical position tracking system and a custom 2D motion-profiling algorithm that brings VEX autonomous robots within 15mm of a specified cartesian target, 60% closer than built-in functions.

WLP4 Compiler: A compiler written in C++ that compiles a subset of C to MIPS assembly, with optimizations (constant folding, loop unrolling, loop invariants) that reduce compilation size by 35%.

My Music Mix: A web app to store and play music using the Deezer API, supporting async song search and authentication/storage using Firebase.

Technical Skills

Languages: C++, Go, Python, C, Java, JavaScript, TypeScript, GraphQL, SQL, HTML/CSS

Libraries/Frameworks: React, Next.js, Node.js, Express.js, NumPy, Pandas

Tools/Platforms: Git, Mercurial, Docker, Firebase, MongoDB, PostgreSQL, SQLite3, gRPC, Protobuf, Apollo