

Education

University of Michigan Ann Arbor, B.S. [Computer Science](#)

- relevant coursework: Data Structures & Algorithms, Computer Security, Operating Systems, Web Systems

Skills / Technologies

- C/C++, Python, Typescript/Javascript, Bash, OCaml, Java, Git, Cloud, Docker, Kubernetes, Systems, Web, Research, Unix, Vim

Work Experience

Yoh LLC / Google - Backend Software Engineer (Contractor)

Mar. '24 - now

- lead product integration efforts (AI Safety models, namely Vertex Foundation) through writing RPC services/protos/complex material components/bug tickets, kicking off builds, organizing bug bashes, triaging issues, and conducting code reviews
- launched an improved Code Compliance landing page (inbox mini) with complex Angular routing and advanced sorting
- conducted several app test crawls and wrote backend services for classifying AI agent content, used for App Compliance

Confluent - Software Engineer

Apr. '21 - Sep. '23

- won the company-wide Ship it award for drastically reducing Semaphore CI times by improving / parallelizing checks
- engineered end-to-end test infrastructure and environment checks for mission critical tests for our biggest customers (i.e. Ultra 64-CKU tests) used for 10x Kafka and nightlies used for releases in Python, delivered results for our flagship conference
- developed from inception metrics collection (Prometheus), data pipelines (BigQuery), and dashboard creation (Metabase/Tableau) used by multiple teams to track performance of our product over time in many configurations. Served as the point of contact, owning the data and transforming use for other platforms and cases such as dynamic baseline tracking
- tested product performance at different high configurations (API keys, user accounts, service accounts, environments, etc) to test unexplored limits there, exposing bugs and providing insight into product limitations
- mentored engineers in best SWE practices and Confluent specific tips, also documenting common issues / bugs and fixes
- supported operations through updating infrastructure to support M1 compatibility & migrating from JFrog to ECR for artifacts

Confluent - Software Engineering Intern

Sep. '20 - Dec. '20

- enabled key cloud advantages by adding infrastructure to run Confluent's flagship on-prem product in the cloud (rather than locally) such as environment standardization (same configurations and hardware), faster computing, automation, less strain on personal hardware, etc – improving the ease of comparing performance differences between the on-prem/cloud products
- improved a separate tool used to start the Confluent on-prem releases within the cloud, such as more robust Terraform version checking and ensuring public DNS addresses were generated for custom security groups/subnets

Google - Software Engineering Intern

May '20 - Aug. '20

- designed and implemented components that interface with the OpenTelemetry C++ SDK ([open source distributed](#) monitoring standard) for in-process debugging web pages, the public version of heavily utilized solutions at Google/Uber scale companies
- merged thread-safe code with [unit tests](#) successfully to the official repository despite having limited and ambiguous docs
- [published](#) helpful findings to the OpenTelemetry Medium blog and spec (~4,000 Github stars in related repositories as of beta)

The Aerospace Corporation - Software Development Intern

May '19 - Aug. '19

- sped up frontend updates by 100%+ by refactoring [React/Redux](#) code & debugging [Django Python](#) backend TCP/UDP issues
- deployed a [Dockerized](#) Flask site (nginx load-balancer, custom DNS) to [Linux](#) server for departmental software version tracking

University of Michigan Center for Academic Innovation - Software Development Fellow

Nov. '19 - May '20

University of Michigan School of Information - Research Assistant

Oct. '18 - May '19

Other

Gradual ALFA-ML Project

Jan. '20 - Mar. '20

- implemented a [functional programming](#) language using [OCaml](#) with function, number, boolean, product, and unit types with additional functionality like function application, gradual typing, branching, and mutable references in memory
- programmed type synthesizers, type analyzers, and statement evaluators that handled various unary and binary operators

Wikipedia Search Engine Project

Mar. '19 - Apr. '19

- programmed a robust [distributed](#) and [multithreaded](#) system with worker/master [socket](#) communication and a Hadoop-like [map reduce Python](#) server to quickly process tasks that performed information retrieval using tf-idf and PageRank scores
- completed the search engine stack with [React](#) frontend and [SQLite](#) database deployed to [Amazon Web Services](#)

Scholarships: [AnitaB.org](#) Grace Hopper Scholarship, Rove Pest Control National Scholarship (winner out of 1000+ applicants)