
EDUCATION**University of Washington**

Expected Graduation: June 2024

Bachelor of Science in Computer Science

GPA: 3.94 (*Dean's List*)

CSE Coursework: Distributed Systems, Systems Programming, Data Structures & Parallelism, Software Design & Implementation, Hardware/Software Interface, Foundations of Computing I/II, Operating Systems [Autumn 2022]

EXPERIENCE**Software Engineer Intern**

June 2022 – September 2022

Google

Mountain View, CA

- Aided migration of Ads account review tool to new tech stack by building a frontend component to organize queues of flagged accounts.
- Overhauled user experience by implementing sorting, filtering, favoriting, and pagination on a model-view-controller architecture.
- Streamlined end-to-end usability of fully-featured user interface by integrating the project with Ads backend services.
- Directly impacted timeline of team's tool migration OKRs by delivering features with 100% code completion and test coverage.

STEP Intern

June 2021 – September 2021

Google

Remote

- Enhanced user experience on web applications by integrating column configuration settings into a public-facing table element.
- Designed complex algorithms to organize and mutate column data incorporating Closure Templates, TypeScript, and Protocol Buffers.
- Shipped features to Payments web exceeding project milestones, including support for accessible drag-and-drop reordering.
- Demonstrated attention-to-detail in software development through design, implementation, testing, code review, and presentations.

Teaching Assistant

January 2021 – June 2022

Paul G. Allen School of Computer Science & Engineering

Seattle, WA

- Guided student mastery of concepts including data structures, algorithms, and parallel computing via remote and in-person instruction.
- Fostered computer science education for 200+ students by leading discussion classes and holding interactive 1:1 office hours.

Controls Software Developer

January 2021 – June 2022

Advanced Robotics at the University of Washington

Seattle, WA

- Enabled success of UW's RoboMaster team by iteratively developing C++ controls software via Agile methodology.
- Improved auto-aim performance by redesigning controls/vision interop serial protocol and implementing robot turret angle solving.

PROJECTS**Distributed Key-Value Store** Java

- Provides a highly-available, scalable, fault-tolerable and transactional key-value store implementing the Paxos consensus algorithm.
- Iteratively developed a distributed application that implements state machine replication and database sharding.

Campus Paths

Java, TypeScript, React, Node.js

nilecamai-campuspaths.netlify.app

- Displays the most optimal paths between requested locations at the University of Washington via a custom-built full-stack application.
- Outperformed minimum project specifications by incorporating GPS functionality to enable pathfinding from any physical location.
- Implemented a Java directed graph, Dijkstra's algorithm, REST API endpoints, and TypeScript React user interface.

FaceMe

Python, OpenCV, Google Cloud API

devpost.com/software/facecentric

- Enhances audio-visual accessibility in video calls to help elderly relatives stay connected with family during the pandemic.
- Implemented on-screen visual cues responding to real-time camera input using OpenCV and Google Cloud Vision.
- Delivered project and presentation at DubHacks 2020, winning Best Use of Google Cloud API and Best First-Time Hack.

TelloMapper

Android, Java, Go

play.google.com/store/apps/details?id=riverflow.tellomapper

- Allows DJI Tello users to create and deploy remote autonomous flight paths in an interactive mobile Android app with 100+ downloads.

AWARDS

Best Use of Google Cloud API & Best First-Time Hack

DubHacks

October 2020

First Prize

RoboMaster University League North America

June 2021

World Champions

FIRST Robotics Competition

April 2018