Adhvik Kanagala

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Education

Carnegie Mellon University

Bachelor of Science
Computer Science, May 2024

GPA: 3.92
Dean's List, High Honors

Relevant Coursework:
- Computer Systems
- Parallel & Sequential Data Structures and Algorithms
- Great Ideas in Theoretical Computer Science
- Distributed Systems
- Algorithm Design and Analysis

Activities

ScottyLabs
Tech Project Lead, ScottyMaps

Nozari Lab
Undergraduate Research Assistant

Skills

Languages (ordered by experience):
Python · C · Standard ML · Erlang · Hack/PHP · Thrift · C++ · Javascript · OCaml · Typescript · Dart · x86-64 · R · MATLAB

Technologies:
Git · Mercurial · Thrift · MongoDB · React · Flutter

Other Skills:
Teaching · Review

Work Experience

Meta · SWE Intern, WhatsApp Business Infra   May 2022 – August 2022
- Work with Erlang (WhatsApp server), C++, Thrift, Python, and Hack (Meta-internal PHP) to migrate a portion of WhatsApp Business backend from dedicated servers to serverless infrastructure hosted on facebook.com
- Greatly reduced development overhead, improving dev velocity and simplifying a heavily-used messaging pipeline

15-112 Programming and Computer Science · Head of Review   Feb 2021 – Present
- Collaborate with professors to lead the review team, which provides actionable feedback and approves class notes, assessments, assignments, and all other student-facing material before public release
- Mentor 10 students each semester through a 1000-1500 line term project showcasing algorithmic complexity and visual design

Nozari Lab, Carnegie Mellon University · Research Assistant   Feb 2021 - July 2021
- Worked with the jsPsych library to build and deploy a web-based linguistics experiment to investigate language production pipelines through the task of typing words
- Built a processing tool in Python to categorize linguistic errors in typed input

Projects

SL Sports · Developer   Summer 2021
- Used the MERN stack to digitize player management for Sri Lankan national athletics
- Built a desktop website in React for sports associations and national sports council to track and approve activities, payments, and competitive standings
- Deployed a mobile app with Flutter for players and coaches to track activities and payments

Tartanhacks Dashboard · Developer   2020-2021
- Developed a hackathon-focused dashboard app for iOS, Android, and the web
- Implemented leaderboards, check-in system, project submission, team search, event calendar, and an account system
- Deployed a backend API with MongoDB and Express.js to manage hacker and event data
- Used for TartanHacks 2021, an international hackathon at CMU with 350+ participants

Primrunner · Sole Developer   Fall 2020
- Implemented a rogue-like mazerunner game by utilizing Prim's algorithm to generate successively larger mazes filled with weapons, powerups, and enemy AI
- Built in Python, using Tkinter and a graphics package built at Carnegie Mellon

Research and Publications

Protein Analysis of selected genes of *Landoltia punctata*
Author, Multiple sequences published on NCBI's GenBank (2020)