AVANTIKA NAIK

Computer Science Student at Carnegie Mellon University

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EXPERIENCE

Vision Products Software Engineering Intern Apple

May 2023 - Aug 2023

Sunnyvale, CA

- Researched image comparison algorithms and analysis metrics for Mixed Reality images.
- Wrote a modular image comparison Swift library and API from scratch that implements multiple custom and standard algorithms for mixed reality.
- Pioneered documentation since none of the existing solutions met the unique demands of mixed reality environments.

Vision Products Software Development Intern Apple

May 2022 - Aug 2022

Sunnyvale, CA

- Developed an internal AR/VR QA dashboard by adding org specific functionality and features via HTML, CSS, Python, SQL, and various internal Apple tools.
- Added over 1000 lines of code and sped up website load time by 55%.

Computer Science TA Carnegie Mellon University

🛗 Jan 2022 - Dec 2022

Pittsburgh, PA

- TA for 15-151 (Discrete Math), 15-217 (Logic & Mechanized Reasoning), 07-131 (Great Practical Ideas for CS), and 07-021 (Mathematical Foundations).
- Held office hours, designed course content, and graded assignments.
- Covers content such as discrete math, first-order and symbolic logic, SAT solvers, Git + Github, Vim, and Bash.

Cloud Computing Intern DEKA Research and Development

June 2021 - Aug 2021

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- Updated and improved over 2,000 lines of outdated Python code from 2.7 to 3.7, adding documentation, testing, and improving efficiency of internal AWS reporting tool by 78
- Set-up and deployed a new multi-service AWS account.

EDUCATION

Bachelors in Computer Science Carnegie Mellon University

Pittsburgh, PA

• Senior studying Computer Science, minoring in Innovation and Entrepreneurship. Director of Events for ScottyLabs, Head Leadership of Women@SCS, SCS4AII.

LANGUAGES & TOOLS



PROJECTS

Tikademy - Personal Project

Aug 2020- Jan 2021

 Python web app created with Flask and a SQLite database that aims to bridge the gap between tutors and students by connecting them through a matching algorithm.

Phasmophobia112 - Personal Project

Movember 2020

 Randomly generated maze game created with Python Tkinter that incorporates a SQLite database. The game's implementation involved the A* algorithm and recursive backtracking.

Petal - Sego Lily Hacks

August 2021

 Website that gamifies saving the environment by letting users create an account where they can log their actions to grow or shrink a flower. Devpost Link

HackerGames - New Year New Hack New Year New Hack - Jan 2021

 Party pack of various games that can be played against an intelligent AI or multiplayer using sockets to encourage social distancing. Devpost Link

AWARDS

- MIT Blueprint Hackathon 3rd place winner - Devpost Link
- NCWIT Aspirations in Computing 2020 Regional Affiliate Winner
- Science Ambassador Scholarship Finalist linked here
- SegoLily Hacks Winner linked here