

Harsha Krishnaswamy

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Education

University of California, Merced

Aug 2021 – May 2024 (Expected)

- **Bachelor of Science:** Computer Science and Engineering (CSE) | GPA: 3.6

Skills

- **Languages:** Python, Java, C++, C#, Dart, SQL, Golang, JavaScript, Bash, HTML, CSS, Game Maker Language (GML)
- **Software:** Matplotlib, Tesseract, Wireshark, Git, Flutter, Google Firebase, Unix, Linux, Unity, GameMaker Studio 2, Blender

Experience

Matrix Precise, UI Developer Intern

Jun 2021 – Aug 2021

- Created development tools and improved backend for a disaster-response workflow toolkit that allows groups like schools, local govts, and military bases to create custom notification systems to support disaster response
- Built a UI library with Flutter and Dart to save hundreds of engineering hours on internal and customer websites
- Developed a search function that allows users to navigate the website using keywords, titles, and body text
- Extended the backend to store notifications, messages, and main website guidelines with Firebase, which supported partnerships with military bases by enabling them to send 10,000+ notifications over pilot rollouts
- Tested and debugged customer websites, iOS applications, and internal resources to expedite development

CyberPatriots, Ubuntu/Windows Division, Team Lead

Aug 2017 – May 2021

- Led a 4-person team to the top 30% in national standings in the US AFA CyberPatriots Cybersecurity competition
- Secured mock computer networks and compromised virtual machines running Ubuntu, Windows 10, and Windows Server 2016 with custom Bash scripts, Wireshark, SSH, LightDM, and Nmap during timed competitions

Ace Coding, Hardware Teacher, Python

Feb 2019 – Mar 2021

- Taught 15 students programming topic including data types, user I/O, boolean logic, and sorting algorithms
- Coded cards games and text replacement programs as guided projects to better teach Python to new students
- Introduced 90 middle school students to hardware concepts by lecturing about CPU, GPU, RAM, etc.

Pleasanton Unified Tutoring, Tutor

Aug 2019 – Mar 2020

- Tutored 20 middle school students across all school subjects, including math, computer science, and English
- Prepared review lectures across different subjects for groups of students to efficiently support the class
- Assisted program director with grading student projects, essays, and tests for insight into student performance

Projects

Personal Website, Sole Developer

- Designed a website using HTML 5, CSS 3, and JavaScript to host my past programming projects
- Linked multiple web pages and created animations for each web page through CSS' animation toolkit
- Added data tables to describe and store past projects
- Customized the website with interactive elements using JavaScript

Adventure 2, Sole Developer

- Built a platformer and puzzle game with 4 levels of ascending difficulty using GameMaker 2 and GML
- Designed pixel art characters, animations, and 2D backgrounds using GIMP and built-in pixel art design tool
- Programmed enemy movement to attack the player using GML