

# Afra Mahammad

(408) 664-6353 | amahammad@scu.edu | [LinkedIn](#)

## SUMMARY

---

I am a junior at Santa Clara University, majoring in Computer Science and Engineering. I have over 5 years of experience in programming and teaching Python, Java, and C++. I am the current treasurer for ACM, and was a freshman representative of SWE. I won two prizes at hackathons in 2022 and 2023. I was the public representative and treasurer of my local robotics team, and won several awards, qualifying for FIRST Worlds Championship 2020.

## EDUCATION

---

Santa Clara University (SCU), Santa Clara, CA  
Bachelor of Science (B.S.) in Computer Science and Engineering  
GPA: 3.558

Expected June 2025 (Currently senior-standing)

**Relevant Coursework:** Principles of Design and Implementation of Languages (C/C++, Java), Computer Networks (C), Object-Oriented Programming and Advanced Data Structures (C++), Abstract Data Types and Data Structures (C), Computer Science Principles (Java), Introduction to Embedded Systems (ARM), Introduction to Logic Design, Cryptography

## RELEVANT SKILLS

---

- Experience in programming languages: Java, Python, C/C++/C#, HTML, CSS, JavaScript
- Experience in CAD software: Fusion360
- Platforms: Jupyter, Unity, Github, Arduino, React Native, Flutter, etc.
- Operating Systems: Windows, Linux

## EXPERIENCE

---

### Summer 2023 SWE Internship

June 2023- Present

*Innominds* | San Jose, CA

- Used prompt engineering, LangChain and Open AI to develop generative AI services
- These services create customized text and image responses for professionals in the healthcare and marketing industries
- Transformed medical transcriptions to extract symptoms, diagnosis and medication provided using ChatGPT and LangChain
- Created a personal medical chatbot to look through medical databases to find relevant answers for questions using LangChain
- Used Python, Streamlit, HTML, CSS, LangChain and OpenAI APIs

### Association of Computing Machinery (ACM) Treasurer

May 2022- Present

*SCU* | Santa Clara, CA

- Managed all account activity and created budget plans for each quarter
- Collaborated with Center of Student Involvement to stay up to date on chapter funding
- Communicated with the rest of the board on our budget at board meetings
- Oversaw receipts for all ACM purchases and submitted reimbursement forms

### Society of Women Engineers (SWE) First-Year Representative

November 2021- June 2022

*SCU* | Santa Clara, CA

- Provided the SWE board a perspective that represented first years and underclassmen as whole
- Brought in underclassmen population at SCU to continue growing the club
- Represented SWE and coordinated with other engineering organizations including NSBE, EWB, WHPE, ACM, ACM-W, and WiE to plan an engineering formal including idea forming, budget control, and planning what each club would contribute
- Trained for different roles including president, treasurer, secretary, events coordinator, outreach, etc.

**Local Robotics Team Public Relations Officer and Treasurer**

August 2018-June 2021

*FTC Omega 9656 / San Jose, CA*

- Aided with fundraising by helping to obtain sponsorships for the team from Freeman Orthodontics, Allstars United, Applied Materials, goBILDA, etc.
- Taught Python Programming to freshman, sophomore, and junior members of the team
- Led a team of 14 other students in organizing and maintaining budget
- Was in charge of treasury and finances of the team and recorded meetings notes
- Helped build binder that won the Think Award in the NorCal Regional Robotics Championships and qualified team for the Houston World Championship 2020

**Python Programming Teacher**

June 2020- September 2020

*Code For Tomorrow / San Jose, CA*

- Hosted Zoom meetings and taught foundations of basic Python programming online for 18 students ranging K-12 for 100+ hours
- Reviewed and enhanced daily lesson plans
- Enhanced curriculum and teaching materials

**AWARDS/CERTIFICATIONS**

---

**Hack for Humanity - Best Hack by Women in Tech Winner**

February 19, 2023

- Part of a team of 6 students
- Built a mobile app using React Native called "A-Cross the Street"
- Made to help people without health insurance find affordable clinics nearby

**Hack for Humanity - First Place Winner**

February 13, 2022

- Part of a team of 2 students
- Built a game using Unity called the "The Ocean Pollution Virtual Museum"
- 3D graphics with messages to show the effects of ocean pollution

**Presidential Volunteer Service Award**

August 10, 2020

- 100+ hours teaching students in a nonprofit organization
- Taught foundations of basic python programming online for 18 students ranging K-12
- Coached them on problem solving skills, debugging skills and testing skills
- Evaluated their codes per coding standards and best practices

**Think Award, NorCal Regional Robotics Championships**

March 30, 2020

- Qualified for Houston World Championship 2020
- Was in charge of sections on sustainability, finance, and business plan
- Helped create documentation of robot design, prototypes, and protocols for management

**Finalist Alliance Captain; Rockwell Collins Innovate Award; Connect Award; Control Award**

2019-2021

- Qualified for NorCal regionals 2020
- Awarded for multi-pronged outreach in our community and robot performance