MAHARSHI GHOSH

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EDUCATION

UNIVERSITY OF CALIFORNIA. Santa Cruz, CA (Freshman) (2024-)

 $Relevant\ Coursework:\ Introduction\ to\ python\ (CSE20),\ Multivariable\ calculus\ and\ Linear\ Algebra\ (Math23A),\ Elementary\ Physics\ -\ Mechanics\ and\ application\ (PHYS\ 5A\ and\ PHYS\ 5L)\ ,\ Introduction\ to\ the\ internet\ and\ world\ wide\ web\ (CSE-80N)$

Major: Computer Engineering B.S

GPA: 3.9/4.0 Major GPA: 4.0/4.0 **High School Education**

FOOTHILL HIGH SCHOOL. Pleasanton, CA (2020-2024)

Relevant Coursework. Honors Principles of Engineering. Honors Digital electronics. Honors Pre-Calculus. AP Government. AP US History. AP Computer Science. AP Calculus BC, Cybersecurity and Robotics Club

SKILLS

Python: 5 Years of experience

• C++: 2 years of experience

• Linux terminal and IT administration: 9 years of experience

• MySQL: 1 year of experience

 Computer Aided Software Design (3D and electrical): 3 Years (Autodesk Inventor, Fusion 360, SketchUp)

• Java: 2 years of experience

OUTSIDE COURSES / INDUSTRY CERTIFICATIONS

- "Google AI essentials" (Coursera): Learned about the practical applications of AI in workplace
- "Embedded Hardware and operating systems" by European Institute of technology (Coursera): Learn fundamentals of programming and creating IoTs applications and understanding the link of hardware and firmware (in-progress)
- "Introduction to Python" (Sololearn) as well as "Introduction to C++" (Sololearn) were courses which I did to practice understand basics of the programming languages python and C++. This will give me a foundation on which I can learn more in the future.
- "Introduction to ML and generative AI" (Sololearn): Unlike the google essentials course, I learned about the different types of AI and how they are contributing to our society in diverse and positive ways. This course also helps me know more about how AI developers develop such technologies through python and prompt engineering.

WORK EXPERIENCES

MOZILLA COMMUNITY BUG CONTRIBUTER (November 2024-)

- I joined Bugzilla as a community contributor to find bugs related to the Mozilla Firefox browser and help Mozilla community members fix those issues. As I already use Firefox for most of my daily tasks, it ensures that things work well with Firefox, and if a bug arises, I can contribute to the community to fix it, improving my experience. This will help me become more experienced in understanding the inner workings of web browsers in general (especially the Gecko engine) and enhance my debugging skills.
- Since Firefox is based on a foundation of C++ code, fixing bugs in C++ helps me gain more experience in the language by identifying and resolving issues more efficiently and improving code quality.

SPARKFLOW AI INTERNSHIP (June 2023-August 2023)

• I worked as an intern at Spark flows Inc to gain knowledge of the product called Fire Insights. This is a self-serving, intuitive, data analytics platform to visualize complex datasets in a very presentable manner. This gave me immense experience in the realm of data science and helped me learn how to properly analyze data, further influencing enterprise decisions.

- Studied and test drove the operation and inner working of Fire Insights, a code free platform which makes organizing data much more accessible to the end user and businesses
- Created a project using power tools to collect, filter, organize and visualize various types of data in various scenarios
- Developed a workflow to predict revenue of customers using large dataset of fast and current sales; filtered data to
 normalize it; performed mathematical operations to forecast future revenues and days taken to close deals, which is
 a key metrics for the sales organization
- Learned how to use ML modeling capabilities to analyze advanced data models
- Studied and modeled various types of data sources and how to combine them to determine advanced analytics on one single platform

CISCO NETWORKING EXTERN. (July 2023-August 2023)

- To Learn more about how cisco contributes to the society and what kind of brainpower and innovation carries out
 there. Basically, to learn more about how to live in a professional environment as well as learn about the networking
 infrastructure and IT technology.
- As part of a 4-person team of interns I developed the coding aspect of our project using Python, Scripts, various software, and other library codes to define abnormalities in a dataset by creating a custom program which filters out those
- Selected as one of 150 interns to learn about Cisco's organization: departments, careers, business operations and application of Cisco products
- Final project was presented to Cisco VP, intern manager as well as to the senior vice president for finance at Cisco
- Attended brainstorming meetings with Cisco VP's, learned about the history of Cisco, product line and innovation, HR and management of personnel, equity, and diversity

HOBBY BASED PROJECTS / CLUBS

UCSC RADIO CLUB (November 2024 – January 2025)

- A hobby club where I explored how to use ham radio to create communication channels and broadcast media and information. I also learned how radio frequencies are generated and how do they work in transferring signals/information's via space to wide areas and range.
- I did an activity about creating your own radio station and observing the effects while they transmit signals and
 information and how I used that knowledge from the previous activity to do an activity to find the radio which is
 hidden somewhere in the city

UCSC SLUGBOTICS (January 2025-)

- SOMARS sub-team: Contributing to researching the effects of wildfires and creating model/simulations in
 MATLAB to analyze potential ways to fight wildfires and prevent them in the first place. Will also focus on
 comprehensive software and hardware system to manage autonomous drones that assist in wildfire response. The
 resulting system will be designed to integrate wildfire modeling, drone communication, and sensor management to
 simulate and implement effective real-time solutions for wildfire monitoring and control.
- ROVER group: Contributing for the electrical, build and design part for the UCSC team for the University Rover competition. Currently participating for the initial onboarding to start the build of the project.

REPAIRING AND FIXING COMPUTERS. 3 years and continuing (Started in summer of 2021)

In pursuit of my hobbies and interests which coincided with my interests in technology, repairing computers was one hobby which I used to never like but become one of my goes to hobbies. This change came about because of the connections inhibited from repairing computers for others, essentially helping others in their daily lives. Through these ways, I helped my friends, teachers and even school administrators fix computers and troubleshoot them effectively. I was also able to fix a junk computer as well and make it my NAS server for my home where I can keep files which my family and friends can access from anywhere in the world.