

SUJAL SHAH

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EDUCATION

Franklin & Marshall College

Expected May 2027

Bachelor of Arts in Computer Science; Cumulative GPA 4.0/4.0

Relevant Coursework: Data Structures and Algorithms, Multivariable Calculus (Calculus III), Strategies for Organizing, Progress and Its Critics, Physics, Accounting for Decision Making, Integration (Calculus II), Economics

Honors and Awards: Generation Google Scholarship recipient 2024-25, Honor's List (Fall 2023, Spring 2024), Summer Hackman Scholar

St. Xavier's College (High School), Maitighar, Nepal

July 2020 – September 2022

GPA: 3.81/4.00 with Advanced Coursework in Physics, Mathematics, Biology, Chemistry, English and Nepali

SKILLS

Programming Languages: Java (Object Oriented Programming), python, SQL, C, C++, HTML, CSS, JS, Django, Flask

Developer Tools: Git, Linux, APIs, virtualization

Soft Skills: Time management, Communication, Leadership, Teamwork, Detail orientation, Collaboration, Adaptability

PROJECTS & RESEARCH

Nanostars, College-level Astronomy Research Project

September 2023 – Present

- Enhance research and critical analysis competencies through comprehensive review and evaluation of original graphs and data to recognize if the given signal is a pulsar; attended and presented at Nationwide Astronomy Teleconferences

HoyaHacks, College-level coding Hackathon at Georgetown University

January 24-26, 2024

- Developed an environmentally-focused app prototype, which projected to reduce the university's energy expense by over \$200,000 annually

Arduino Robot Project for SET Exhibition

December 2021

- Designed a complex Arduino automatic trash bin with various functionalities; (Language used: C++)

Website Development Project

November 2022

- Created a personal portfolio website; used as a primary professional medium to connect to people; contacted 10 times for photography related projects; languages used: HTML, CSS

RELEVANT WORK EXPERIENCE

Research Assistant, Mathematics Department, Franklin & Marshall College, Lancaster, PA

February 2024 – Present

- Collaborating with Prof. Tom Hull on a project combining Computer Science and Mathematics. Focusing on computational origami algorithms, analyzing traditional origami patterns to develop and implement algorithms that translate these designs to computational code; using softwares like Mathematica, Blender
- Aiming to bridge the gap between theoretical mathematics and practical applications by creating innovative computational models

IT Support & Special Event Specialist, Franklin & Marshall College, Lancaster, PA

August 2023 – February 2024

- Serve as the first point of contact for students, faculty and staff calling into or visiting the campus helpdesk, troubleshooting and resolving technical and device issues in a prompt, courteous and professional manner
- Provide technical AV and device support for large-scale lectures and special events

Graphics Designer, Mathematics Initiatives in Nepal, Remote, Nepal

April 2023 - August 2023

- Designed posters, marketing and social media campaigns to enhance the social media presence and national visibility of this national-level organization run by high school students and graduates for the purpose of making mathematics accessible to youth irrespective of geography and socioeconomic factors

WordPress Website Developer, DocsKool, Kathmandu, Nepal

April 2023 – July 2023

- Built both the frontend and backend of the organization's website using WordPress, while managing and updating content and enhanced SEO to improve online presence and reach

Data Entry Operator, Nepal Red Cross Society, Kathmandu, Nepal

June 2022 – November 2022

- Demonstrated detail-orientation, organization and communication competencies while categorizing, organizing and using data analyzing software to analyze blood grouping data

CO-CURRICULAR LEADERSHIP AND COMMUNITY SERVICE

Organizer and Mentor, Uunchai Summer program

March 2024-present

- Leading an initiative by coordinating with undergraduates from different universities to run a five-week mentorship program. Aimed at middle and high school students in Nepal, the program enhances educational accessibility and practical learning in fields such as Computer Science, Mathematics, Economics, Art, and Psychology, with a focus on empowering underprivileged and underrepresented students in the rural community.

Teacher, Partnership in Education (PiE)

June 2021 - April 2022

- Taught Computer Science, Mathematics, and Science to 200+ underprivileged and underrepresented students in the community while mentoring them to persist and succeed academically and thrive socially and developmentally

Event Manager, SXC Computer Club

June 2021 - April 2022

- Learned CSS, JS, C++ and taught coding to club members while interfacing with administration on club funding and priorities; liaison between club and the administration