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Munich, Germany

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Portfolio, LinkedIn & GitHub

Saksham Prajapati

Master's Student in Quantum Science and Technology

PROFILE

Analytical and resourceful graduate with a strong foundation in Physics and Computer Science, currently expanding expertise in quantum technologies through advanced studies. Experienced in computational physics, spectroscopy research, and data-driven problem solving, with a growing focus on quantum hardware and simulation. Proficient in Python, R, MATLAB, and scientific tools, with hands-on contributions to astrophysics research and American Physical Society projects. Recognized for adaptability, clear communication, and a strong drive to solve complex problems at the intersection of science and technology.

EDUCATION

Master of Science in Quantum Science and Technology

Technical University of Munich, Munich, Germany

Relevant Courses: Quantum Information/Hardware, Simulation of Quantum Devices

10/2024 – Present

Bachelor of Science in Physics

University of Missouri – St. Louis (UMSL),
St. Louis, MO

Minor in Computer Science and Mathematics

GPA: 3.78/4.0
08/2019 – 12/2023

PROFESSIONAL EXPERIENCE

Social Network Data Analyst

02/2024 – 10/2024

American Physical Society, College Park, MD

- Conducted Social Network Analysis on Physics teachers across three U.S. regions.
- Developed programs in R and Python for data analysis, interactive visualization, and tracking progress within educational networks.
- Used data analysis to suggest important improvements for how educators work together. These suggestions helped change policies to build teamwork among teachers more effective.
- Played a key role in enhancing network connections between Physics teachers by identifying and analyzing data visualization and interaction patterns, contributing to the improvement of collaborative networks.
- Presented a poster on 'Network Analysis of the STEP-UP Program's First Cohort' at American Association of Physics Teacher's Summer Meeting 2024.

Undergraduate Research Assistant

01/2021 – 12/2023

University of Missouri – St. Louis, St. Louis, MO

- Performed advanced data calibration and reduction for astronomical datasets, utilizing quantitative methods to analyze chemical compositions in comets; contributed to significant research findings.
- Assisted in writing proposals for comet observation.
- Remotely observed and collected data using the NASA's iShell Near IR-Telescope located at Mauna Kea, Hawaii.
- Utilized statistical methods and quantitative tools to process Near-IR spectroscopy data, enhancing the accuracy of chemical analysis.
- Presented a research poster on 'Detection of Hydrogen cyanide and Ammonia in Comet 67P/Churyumov-Gerasimenko' at Physcon-2022.

Student Teaching / Lab Assistant

08/2021 – 01/2023

University of Missouri – St. Louis, St. Louis, MO

- Led Physics discussion classes, graded assignments, and tutored students, enhancing their understanding and performance in coursework.
- Supervised lab procedures, demonstrating experiments and ensuring student safety and comprehension in practical Physics applications.

KEY SKILLS

- Python/R
- MATLAB/Octave
- Spectroscopy Research
- Data Visualization
- Data Simulation
- JIRA
- Agile Methodology
- GitHub
- Communication
- Organized
- Team worker
- Adaptability
- Analytical Thinking
- Eager to Learn more
- Adaptability

LANGUAGES

- English (Professional)
- Nepali (Native)
- German (A1.1)

Public Engagement Intern (Programmer) 05/2022 – 08/2022
American Physical Society, College Park, MD

- Automated the APS Physicists-To-Go Program's matching process with a Python program, drastically reducing processing time from days to few seconds.
- Independently learned Python to address complex issues, demonstrating quick learning and technical problem-solving skills.

Software Quality Engineer Intern 05/2023 – 08/2023
Centene Corporation, St. Louis, MO

- Conducted comprehensive software testing with a team, ensuring quality and improving user experience, while effectively utilizing Agile/JIRA for project management and team collaboration.
- Demonstrated problem-solving skills in identifying and resolving software issues, contributing to the development of reliable solutions in a fast-paced environment.

ONLINE COURSES & CERTIFICATIONS

Exploring Cosmology with Machine Learning 08/2023
Missouri Institute of Science and Technology

Intro to Quantum Computing 09/2023
Coursera

AWARDS AND RECOGNITIONS

- Degree with Distinction in Research and Departmental Honors at UMSL (2023)
- Senior Alumni Award at Physics Department - UMSL (2022)
- Junior Alumni Award at Physics Department - UMSL (2021)

OTHER ACTIVITIES

- Public Relation Representative for Physics and Astronomy Club – UMSL (2021 – 2023)
- Student Government Association Representative for Physics and Astronomy Club - UMSL (2020 – 2021)
- Member of Scout Rover Ranger in Nepal (2016 - 2019)