

KUSUM SUBEDI (she/her)

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EDUCATION

Bachelor of Science, Mechanical Engineering
Lafayette College, Easton PA

Expected May 2026
GPA 3.84

SKILLS

Python, R, Fusion, NXCAD, Qiskit, Microsoft Word, Excel, PowerPoint, Canva

TECHNICAL EXPERIENCE

Bergh Research Scholar

May 2023 – Sept 2023

Project: Natural Language Processing Methods for exploring the relationship between COVID-19 Tweets and the number of cases

- Performed Data Visualization using Python and produced more than three thousand visualizations of more than a billion-tweets collected related to COVID-19 in all the US States since the pandemic.
- Performed time series correlation analysis using Python, and statistical analysis such as ANOVA using R on the COVID Tweets, and the COVID-19 cases in all 50 US States, and all the counties to understand the correlation between the pandemic outbreak, and the trend of social media awareness.

IBM Qiskit Global Summer School Scholar

July 2023 – August 2023

- Participated in a virtual lecture and lab series, covering Quantum Topics including Quantum Systems, Quantum Circuits, Entanglement with Qiskit, Quantum Algorithms, Quantum Computing Hardware and Super Conducting Circuits, Quantum Noise and Mitigation, Iterative Quantum Phase Estimation, and Variational Quantum Eigensolver.

WOMANIUM Global Quantum Summer School Scholar

July 2023 – Sept 2023

- Participated in a virtual lecture series, with assessments covering Quantum Topics that included eight different modules: Basics of Quantum and Quantum Computing, Quantum Algorithms, Quantum Key Distribution, Quantum Sensing, Quantum Computing Software, Quantum Computing Hardware, and Quantum Error Correction

NASA Proposal Writing and Evaluation Experience Academy, Finalist

Jan 2023-May 2023

Project: Excavation Auger Surface Robot

- Organized the team of researchers as a Chief Scientist to draft a proposal for an innovative Regolith Collector technology based on the State-of-art technology (RASSOR) for NASA
- Drafted Quad Chart, Gantt Chart, Risk management chart, Key Technical Parameters, and New Technology Report
- Earned the Siemens NXCAD Skill Badge for participating and completing all the NXCAD design assessments.

Google Data Analytics, Google Certificate, Google, Coursera

June 2023

- Completed the professional certification in Data Analytics with skills in cleaning, organizing, and preparing data for analysis using analytical tools (R, Python, spreadsheets) to analyze the data throughout its life cycle.

Machine Learning, Stanford University, Coursera

June 2021

- Built and trained ML models (linear, logistic regression) for prediction, clustering, and anomaly detection with Python, scikit-learn, and Tensor Flow.

LEADERSHIP EXPERIENCE

Resident Advisor

August 2023-Present

- Fostering relationship and building community among 150 first year residents in two residence buildings by planning and organized various community building social, academic, and life skill programs for residents.
- Performing administrative duties: budgeting, maintenance requests, information reports, duty report, roommate changes, and addressed different forms of policy violations and emergency incidents that require immediate response.

DYER Fellow, Lafayette College

Sept 2022-present

- One of the ten '26 fellows to receive professional, financial, and social resources for entrepreneurial development.
- Weekly engagement with mentor and fellows to brainstorm, develop, build, and pressure test real entrepreneurial project and achieve individual milestones.
- Actively engaging in personal and professional development workshops, projects, and networking activities specifically curated for the DYER fellows aimed at nourishing entrepreneurial skills.

EIT Digital Summer School Participant

July 2023–August 2023

Summer School: Unfolding Sustainability Through Green Digital Solutions, France

- Awarded Haven's Award through Engineering Department, Lafayette College to pursue a non-traditional experience.
- Developed a business venture idea in the field of crowdsource product delivery to promote sustainable online delivery system through intensive two weeks in-person school.
- Developed skills in business modeling, financial planning, and understood the ecosystem and stance of sustainable digital technology in Europe and around the world.