Mehak Gulati

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EDUCATION

University of California, Davis

Bachelor of Science in Computer Science

Davis, CA Expected Graduation: June 2027

RELEVANT COURSEWORKS: Python, Calculus, Discrete Math, Linear Algebra, Programming and problem solving (Use of basic UNIX tools), Software development and Object-Oriented programming in C++, Data Structures, Algorithms, & Programming, Algorithm Design & Analysis, Elementary Financial Accounting

EXPERIENCE

CS Tutor April 2025 – Present CS Tutoring at UC Davis Davis, CA Provide academic support in Python programming and core data structures to undergraduate students through 1-on-1 and small group tutoring sessions. Guide students in understanding algorithms, recursion, and object-oriented programming by walking through assignments and real-time debugging. Developer April 2025 - Present Machine Learning Student Network Davis, CA Develop machine learning models (regression, classification, clustering) to analyze student lifestyle data and identify patterns influencing academic performance and stress. Build a personalized recommendation system and interactive dashboard using Streamlit to support students' time management and mental well-being. Hosted application using Heroku; integrated modular components for scalability and user customization. **Technical Development Intern** February 2025 – Present Girls Who Code Davis, CA Co-lead project initiatives alongside VPs to streamline execution, design training materials, and create scalable resources that empower technical project teams. · Designing and facilitating technical workshops, delivering hands-on guidance and real-time troubleshooting to enhance team productivity and learning outcomes. Software Development Intern June 2024 – August 2024 Ernst & Young Delhi, India Developed an AI chatbot with Langchain, RASA, Dialogflow; integrated into Slack via API + Flask Implemented text extraction, chunking & vector generation from PDFs, boosting data processing efficiency by 30% · Collaborated with cross-functional teams, strengthening problem-solving, time management, and technical communication skills.

PROJECTS

 First Year Seminar AlphaFold2, Deep Learning, Genomic Data Conducted research on Alzheimer's disease, utilizing deep learning tools like AlphaFold2 to predict protein structures and functions, applying Al techniques in biology and medicine. Gained hands-on experience interpreting scientific papers, visualizing genomic data, and presenting research findings to contribute to real-life studies. 	
 Personal Finance Tracker Python, Data Visualization, Financial Insights Developed a Python-based application to help users manage expenses and savings 	January 2025 – Present , integrating data visualization tools for

• Enhanced user decision-making by providing interactive visual reports and analytical insights into financial trends.

SKILLS

financial insights.

Languages: Python, R, Java, HTML/C++, SQL, Hindi & English

Tools: Git, Docker, Postman, Linux, Figma, VS Code, Tableau

Technologies: MongoDB, React, Node.js, Django

Machine Learning & Data Science: TensorFlow, Scikit-Learn, Seaborn, NLP, Pandas, PyTorch

CERTIFICATES

- Al for everyone from Coursera DeepLearning.Al
- Online Course from Coursera Data Science Orientation From IBM
- Online course from Coursera Data Science Maths Skills from Duke University
- Online course from Coursera Getting started with Tableau from Coursera project networ