Vanshika Shah

+1 240-726-2303 | **vshah318@terpmail.umd.edu** | **linkedin.com/in/vshah3** | **github.com/Vanshikashah318**

Education

University of Maryland, College Park College Park, MD, US

Prospective Master of Science in Computer Science ***Graduating: May 2026***

Bachelor of Science in Computer Science ***(GPA: 3.93/4.0)*** ***Graduating: May 2025***

Relevant Coursework: Object Oriented programming (1 and 2), Data Structures, Computer Systems, Algorithms, Parellel Programming, Data Science, Discrete Math, Databases, Calculus (1 and 2), Introduction to Linear Algebra.

Technical Skills

Programming Languages: Java, Python, C/C++,MongoDB, OCaml, Ruby, Rust, SQL, JavaScript, HTML, Racket
Technologies/Frameworks: ReactJS, NodeJS, Git, ExpressJS, CSS, FastAPI, OpenMP,MPI,Rest-API, R, MATLAB, OpenMP, CUDA, MPI
Libraries: Pandas, NumPy, MatPlotLib, Tensorflow, Keras

Experience

Software Developer Intern, *AIVantage* **June 2024 - Present**

- Automations: Developed an advanced hyperpersonalization script in Python for a greenfield product, automating personalized email campaigns and boosting CTR by 85%. Utilized LDA and KMeans for precise data segmentation, enhancing targeting and personalization using DataFrame insights.
- Optimizations: Boosted processing efficiency by 90% with the Knee library and enhanced personalization through expert prompt engineering with OpenAI's API to create effective cluster descriptions.
- Sentiment Analysis: Training an LSTM and RNN model n 30,000+ inputs for product testing to analyze sentiment in campaigns achieving accuracy of 89% reducing manual analysis time by 60%.

Software Engineering Intern, *LeoTechnosoft Pvt Ltd.* **June 2022 - Aug 2022**

- Enhanced database efficiency and quality by developing MySQL queries that eliminated 95% of spam bot data.
- Streamlined data categorization with MySQL queries, cutting processing time by 70%.

Software Developer, *Woodcraft* **August 2024 - Present**

- Developing a Python backend and React frontend for timber sales forecasting and automated stock replenishment, leveraging SARIMA for accurate sales predictions.
- Creating dynamic data visualizations with React and Matplotlib, enhancing real-time decision-making.

Teaching Assistant, *CMSC 330 (Organization Of Programming Languages)* **August 2023 - Present**

- Mentored students in their course work, particularly projects by holding 6+ hours of weekly office hours.
- Developing and designd 5+ projects and course material in Python, OCaml, Rust impacting 900+ students and increasing course completion rates by 25%.

Undergraduate Computer Science Tutor (I4C) **Jan 2023 - Present**

- Delivered tutoring to students in topics like Java, C, Assembly language, aiding students in understanding concepts through explanations and practical problem-solving, improving their academic success by 25%.
- Led group study sessions with about 15 students to foster collaborative learning and improve understanding of course materials.

Projects

Shell Junior | ***C*** **October 2022 - October 2022**

- Developed a C-based shell program for a LINUX terminal, enabling sequential execution of commands with support for AND, OR, PIPE, and NONE operators, as well as SUBSHELL creation.

Image Classification Model | ***Python*** **August 2024 - August 2024**

- Trained a CNN model using Keras and TensorFlow on 50,000 images across 10 categories, achieving 84% accuracy with the Adam optimizer.

Spending Suggester | **AWS, OpenAI API, Python** **December 2023-May2024**

- Developed a program using OpenAI's API to analyze transaction histories from CSV files, extracting spending insights and delivering personalized financial recommendations to enhance decision-making
- Implemented a server-less architecture using AWS Lambda for seamless integration with OpenAI's API, ensuring secure storage and efficient file retrieval with AWS S3, optimizing cloud-based operations.