Amaan Barmare

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EDUCATION

Pennsylvania State University

Bachelor of Science in Computer Science, Minor in Economics

State College, PA

Graduate Date: May 2025

Experience

Software Engineer Intern

June 2024 – Aug 2024

Remote

Augle AI • Designed and implemented a web scraping tool using Scrapy to extract product details and technical data from web

- pages, enhancing data retrieval and analysis • Configured MongoDB for efficient data storage, enabling seamless data management and access for analysis
- Optimized the scraping process by implementing custom spider settings, such as download delays and auto-throttling, which improved scraping efficiency by 40%
- Utilized technologies such as Scrapy Selenium, Python, and MongoDB, resulting in an efficient solution for extracting technical product data

Learning Assistant

Aug 2023 – Dec 2023

Pennsylvania State University

State College, PA

- Hosting weekly LA sessions for MATH 141 (Calculus 2) twice a week to reinforce core concepts, troubleshoot challenges, and provide real-world applications of calculus principles
- Addressing individual student problems to enhance their problem solving skills and promote a deeper understanding of course materials
- Facilitating interactive worksheet sessions with the professor once a week to reinforce key concepts, enhance problem-solving skills, and foster a dynamic learning environment

Software Engineer Intern

May 2023 – Aug 2023

Augle AI

Remote

- Implemented and optimized data processing modules for images, video, and point clouds using Python and related libraries
- Developed functionalities for real-time notifications and video streaming using SMTP and RTCP
- Engaged in collaborative software development, contributing to team-driven solutions and system integrations
- Utilized technologies such as Python, Flask, OpenCV, MongoDB, and PyTorch to enhance system capabilities
- Enhanced system efficiency by 30% through improved inspection processes and actionable insights

Projects

Smart Healthcare System | React, Flask

- Developed a full-stack healthcare application using Flask (backend) and React (frontend), integrating machine learning models for early disease detection and risk assessment of diseases.
- Utilized Chart. js and Matplotlib to create interactive data visualizations, improving healthcare professionals' ability to assess patient risk and make informed decisions.
- Implemented Scikit-learn machine learning algorithms and handled large healthcare datasets with Pandas (NumPy) to deliver accurate predictions for disease likelihood.
- Optimized API communication using Flask-CORS for secure data transfer, and designed a responsive, component-based interface with modular CSS in React for a seamless user experience.

Amazon Stock Monitor Bot | Javascript, Node.js

- Developed an Amazon stock monitoring bot that provides real-time product availability updates, assisting users in making timely purchasing decisions
- Enhanced user experience by integrating real-time notifications and alerts via Discord
- Designed and implemented a user-friendly interface for efficient tracking of stock data updates
- Utilized technologies such as Node.js and Javascript and employed libraries including AXIOS, GOT, and discord-webhook-node for optimal data retrieval and processing

TECHNICAL SKILLS

Languages: Python, Java, C/C++, SQL (Postgres), JavaScript, HTML/CSS

Frameworks: React, Node.js, Flask, MongoDB, OpenCV, PyTorch, NumPy, Scrapy Selenium, Scikit-learn

Developer Tools: Amazon Web Services, Git, Docker