Daniyal Ahmed

Education

Boston University May 2025

Bachelors in Computer Science - Gpa: 3.5

Boston, Massachusetts

Relevant Coursework

- Algorithms Analysis
- Software Engineering
- Computer Systems
- Applications in Data Science

Experience

Boston University Medical Campus

July 2023 - Present

Research Assistant

Boston, Massachusetts

- Enhanced GPU and CPU performance by 30% through targeted optimizations, significantly improving computational efficiency in research applications.
- Managed and optimized particle extraction processes using Relion and Cryolo, increasing data throughput by 25% and enhancing image processing accuracy.
- Leveraged expertise in Bash, Linux, and Docker to streamline research processes, boosting productivity by 70% through the automation of data management and computational tasks.

Boston University CGS

January 2022 - December 2022

Security Assistant

Boston, Massachusetts

• Conducted detailed inventory audits for over 2,000 items bi-annually, identifying and rectifying discrepancies that reduced inventory errors by 95% and improved operational efficiency across the department.

Projects

Scikit-learn in C++ and Python | C++, Python, Machine Learning

July 2024

- Implemented various machine learning algorithms including K-Nearest Neighbors (KNN), Decision Trees, Random Forests, and Naive Bayes in C++, and programmed neural networks in Jupyter Notebooks using Python to facilitate learning and accessibility for others.
- Integrated comprehensive documentation and usage examples within the codebase, making it accessible and user-friendly for other developers and researchers.

A.I Fake News Generator | Python, React, Javascript, Large Language Models

June 2024

- Fine-tuned GPT-Neo 125M model for specific news domains, optimizing performance for various categories such as politics.
- Documented the entire project workflow on GitHub, encompassing over 1,000 lines of annotated code and detailed guides for data handling and model tuning.
- Integrated model into a user-friendly application, allowing users to input keywords and receive generated news articles in real-time.

Deck - A Full-Stack News App | Python, React, Javascript

March 2024

- Integrated News API and Reddit API to aggregate real-time, comprehensive news data for a full-stack news application, enhancing content diversity and user engagement by enabling access to over 1000 daily news articles from diverse sources.
- Spearheaded development and strategically assigned roles and tasks to 15 team members, optimizing team dynamics and project workflow, which resulted in a 50% increase in development productivity and reduced project completion time by 30%.

Technical Skills

Languages: Python, Java, C, HTML/CSS, JavaScript, React

Technologies/Frameworks: Linux, HuggingFace, GitHub, Docker

Extracurriculars

BUILDS: Actively mentored over 20 team members weekly in Machine Learning and Software Engineering, enhancing their project completion rates by 40% and contributing to the successful development of 10+ innovative tech projects annually.