# Daniyal Ahmed

# Education

Boston University May 2025

Bachelors in Computer Science - GPA: 3.58, Major GPA: 3.65

Relevant Coursework: Algorithms Analysis, Software Engineering, Databases, Datascience

Boston, Massachusetts

# Experience

# Chrysalis Streaming

August 2024 - Present

Tech Lead

- Rebuilt the website by migrating from static HTML to Next.js. Which improved page load speed from 3.0 to 2.5 seconds and enhancing overall scalability.
- Standardized task assignments and wrote comprehensive documentation for both teams. This allowed for more efficient work and boosted productivity by 9%.
- Refined the new database to support multiple courses per teacher and seamlessly migrated existing Chrysalis data, reducing average API response times from 500ms to 400ms.

# Digital Information Research Lab At Boston University

September 2024 – December 2024

Backend Development Intern

- Built and tested prototypes to validate new concepts, utilizing user feedback and performance metrics to iterate and optimize design.
- Increased product efficiency by 15% through implementing ML-based solutions derived from research collaboration with cross-functional academic teams

Headstarter July 2024 – August 2024

Software Engineering Fellow

- Led cross-functional team collaborations on 3 group projects, driving successful project completion through weekly sync meetings and agile methodologies
- Developed 5 open-sourced projects focused on practical applications and user engagement

# **Boston University Medical Campus**

July 2023 - May 2024

Machine Learning Research Assistant

Boston, Massachusetts

- Enhanced GPU and CPU performance by 10% through targeted optimizations, significantly improving computational efficiency in research applications.
- Automated data processing workflows by 20% through developing Bash scripts and Docker containers for computational task management.

# **Projects**

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

July 2024

• Programmed core machine learning algorithms in C++ (KNN, Decision Trees, Random Forests, Naive Bayes) and neural networks in Python, enhancing learning resources for others.

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

June 2024

- Fine-tuned GPT-Neo 125M for domain-specific news generation, optimizing performance across categories like politics.
- Published over 1,000 lines of annotated code and guides on GitHub, detailing data handling and model tuning.

# Deck - A Full-Stack News App | Python, React, JavaScript

March 2024

- Built a full-stack news app aggregating over 100 daily articles using News API and Reddit API, enhancing content diversity and user engagement.
- Designed and developed the entire frontend using React, while independently implementing 80% of the backend features.

#### Technical Skills

Languages: Python, JavaScript & React, SQL, MongoDB

Technologies/Frameworks: Linux, Machine Learning, Docker

## Extracurriculars

**BUILDS:** Actively mentored over 20 team members weekly in this tech club enhancing their projects and assignments completion rates.