Dylan Farrell

732-519-1679 | Dylancf01@gmail.com | Dylancfarrell.com | github.com/swoopi

Education

Rutgers University New Brunswick, NJ

B.S. in Computer Science *Sep. 2020 - May 2024*

- Relevant Coursework: Algorithms, Intro to Artificial Intelligence, Intro to Data Science, Principles of Information and Data Management, Software Methodology, Discrete Structures, Data Structures, Physics 1 & 2

Experience

Software Engineer Fellow July 2024 – Sep. 2024

HeadStarter AI *New York*

- Developed Munch Mates, a Flutter-based mobile application integrated with Firebase, implementing custom authentication, Yelp API integration, and real-time location services. Features a swipe-based interface for restaurant discovery, user preference management, and social features like shared restaurant viewing sessions.
- Built and deployed 5 AI projects in 5 weeks using React.js, Next.js, Firebase, following agile methodologies with weekly sprints.
- Participate in weekly sessions with engineers from Google, Y Combinator, Stanford, Amazon and venture-backed startups.

Research Extern June 2023 – Aug. 2023

Rutgers MBS *New Brunswick, NJ*

- Researched ways to identify and mitigate evolving cybersecurity threats to Maritime IoT devices, focusing on innovative solutions like the Zero Trust Model.
- Conducted an in-depth analysis of past cyber-attacks on the maritime industry, assessing their impact on operations, finances, and safety.
- Implemented risk assessment models to evaluate potential vulnerabilities and proposed solutions to enhance security measures for maritime operations.

Projects

Smartledgerai.com | ***Next.js, Typescript, NoSQL*** Fall 2024

- Developed a financial reconciliation application using Next.js, enabling users to efficiently match and verify transactions against bank statements and other financial records.
- Implemented transaction matching algorithms that leverage AI to automate the reconciliation process, significantly reducing manual effort and improving accuracy.
- Integrated real-time data fetching from external APIs to ensure users have the most up-to-date transaction information for accurate reconciliation.

Streaming App | ***Java, XML, SQLite, Android Studio*** Summer 2024

- Created an IPTV streaming application featuring secure user authentication, favorite channels for sub-users, streaming channels, and searching across all categories.
- Engineered custom fetchers and parsers to process M3U playlist data for live TV channels, movies, and TV shows, and integrated RecyclerView with custom adapters.
- Optimized the app to ensure compatibility with Google TV, Amazon Fire TV, and various Android TV devices.

Face and Digit Classification | ***Python, Machine Learning, Neural Networks*** Spring 2024

- Constructed a convolutional neural network using a ReLU activation function and L2 regularization to classify handwritten digits and detect faces.
- Attained classification accuracies of 83.8% for digit classification and 92% for face classification.
- Enhanced performance through feature development based on raw pixel data and quadrant-based features for digit images.

Technical Skills

Languages: Java, Python, C, JavaScript, HTML, JSON
Frameworks: React, Next.js Node.js, Django, JUnit
Developer Tools: Git, AWS, Google Cloud Platform, Visual Studio, IntelliJ, Eclipse, Android Studio
Libraries: Pandas, NumPy, Matplotlib, Pygame