

# Dylan Farrell

732-519-1679 | [Dylancf01@gmail.com](mailto:Dylancf01@gmail.com) | <https://www.linkedin.com/in/dylan-c-farrell/> | [github.com/swoopi](https://github.com/swoopi)

## EDUCATION

### Rutgers University

*Bachelor of Science in Computer Science*

New Brunswick, NJ

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

## EXPERIENCE

### Software Engineer Intern

*GiGil Technology*

June 2022 – Aug. 2022, June 2023 – Aug. 2023

North Brunswick, NJ

- Contributed to software for GiGil's client, Johnson & Johnson, to help manage temperatures in manufacturing plants.
- Explored ways to use temperatures probes on Raspberry Pis as sensors.
- Assisted in various projects for development of applications on IIoT devices to increase supply chain efficiency.

### Research Extern

*Rutgers MBS Program*

June 2023 – Aug. 2023

New Brunswick, NJ

- Researched ways to identify and mitigate evolving cybersecurity threats to Maritime IoT devices.
- Assessed risks and implemented innovative solutions, including the Zero Trust Model and advanced encryption techniques.
- Presented findings weekly with a team of advisors and assessed needs for a successful project.

## PROJECTS

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

Spring 2024

- Designed and implemented two classifiers: a two-layer neural network and a perceptron, to classify handwritten digits and detect faces in pre-processed images.
- Achieved classification accuracies of 81% (digit perceptron), 90% (face perceptron), 78.8% (digit neural network), and 92% (face neural network).
- Conducted comprehensive training with incremental data sets, demonstrating improved accuracy with increased training data, achieving up to 86.6% accuracy for digits and 92.7% for faces.
- Developed features based on raw pixel data and additional quadrant-based features for digit images, which optimized perceptron and neural network performance.
- Performed extensive evaluation including training time analysis and prediction error metrics, and visualized results through detailed graphs to illustrate model performance over varying training sizes.

### Online Auction Platform | *Java, SQL, GitHub, JSP*

Spring 2024

- Developed an online auction platform enabling users to list and bid on items, similar to eBay.
- Implemented features such as user registration, item listing, and bid management using Java and JSP.
- Designed and managed database schema and interactions using SQL, including exporting schema for deployment.

### Photos App | *Java, JavaFX, Android Studio, Bitbucket*

Dec. 2023

- Developed a photo application in Java using JavaFX and adapted it for Android.
- Designed user interfaces using FXML for enhanced user experience.
- Implemented features for photo management including tagging, date, and location tracking.
- Maintained project code and documentation on Bitbucket.

## TECHNICAL SKILLS

**Languages:** Java, Python, C, Javascript, HTML, JSON

**Frameworks:** React, Node.js, Django, JUnit

**Developer Tools:** Git, AWS, Google Cloud Platform, Visual Studio, IntelliJ, Eclipse, Android Studio

**Libraries:** Pandas, NumPy, Matplotlib, Pygame