

## Shane Kopec

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## Education

### ROWAN UNIVERSITY

Bachelor of Science: Computer Science, GPA: 3.3

Glassboro, NJ

May 13<sup>th</sup>, 2022

**GitHub:** <https://github.com/kopecs48>

**Portfolio:** <https://kopecs48.github.io>

## Technical Skills

**Languages:** Python (Proficient), Java (Proficient), JavaScript (Intermediate), SQL(Intermediate), C, C++, HTML, CSS

**Technologies:** Django, SKLearn, Numpy, Matplotlib, Metric Learn, Keras, Scikit-learn, Jupyter Notebook, AWS

## Projects

### Social Media Music Player:

- Led a team of six students in developing a full-stack social media music player, integrating Spotify APIs to retrieve user data and enhance user experience
- Orchestrated weekly team meetings to evaluate project progress and plan future developments
- Employed Django framework to develop secure user registration, login, and comment forms, and utilized Python Spotify API to implement song playback and retrieve user data through cached tokens
- Enhanced the user experience by creating a sleek and responsive graphical user interface using Bootstrap

### Mood Web App: <https://skopec.pythonanywhere.com>

- Designed and developed a dynamic blog site that allowed users to create "Mood" blog posts, including a title, body, author, date/time posted, and days in a row with a post
- Engineered user registration, login, and authentication features using the Django framework to ensure site security
- Employed Django Rest Framework serializers to create JSON objects containing mood posts by the current user
- Successfully deployed site using PythonAnywhere and crafted a responsive design with HTML, CSS, and Bootstrap

### Metric Learn Data Visualization:

- Data analysis project aimed at developing accurate estimators by managing multiple natural and synthetic datasets
- Devised a pipeline that harnessed Metric Learn methods to generate metrics and fed them into a KNN classifier
- Evaluated the difference in accuracy across various Metric Learn algorithms by using Matplotlib
- Leveraged the Python libraries SKLearn, Pandas, Numpy, Metric Learn, and Matplotlib across entire project

### User Login and Registration:

- Developed user authentication and registration system using AWS Amplify and Cognito
- Utilized React JS and AWS Amplify UI to craft an interface that displayed current authenticated user fields
- Implemented an automated email verification link that initialized the account into the user pool
- Elevated platform security by implementing a secure password change feature that utilized email prompts

### Perceptron Machine Learning Algorithm:

- Designed and implemented a Perceptron Machine Learning Algorithm capable of accurately classifying sample points on a 2-D plane into one of two categories
- Refined the algorithm by updating perceptron weights using misclassified points from the previous epoch
- Create a hypothesis line as close to the original as possible, leveraging only the sample data points

## Experience

### The Home Depot Sales Associate:

(September 2022-Present)

- Developed strong problem-solving skills by resolving customer issues and finding creative solutions to inventory management and transactional challenges
- Utilize strong customer service skills by providing exceptional service to customers and ensuring a positive shopping experience
- Demonstrated a keen eye for detail, ensuring that all transactions are properly recorded, and all inventory was accurately stocked and organized.