

# BREDA MWELU

• [simonbreda0@gmail.com](mailto:simonbreda0@gmail.com) • [github.com/bmwelu12](https://github.com/bmwelu12) • [linkedin.com/in/breda-mwelu](https://linkedin.com/in/breda-mwelu)

---

## EDUCATION

### Drew University

*Bachelor of Science in Computer Science and French (Double Major); GPA: 3.67*

Honors & Awards: Deans List

Relevant Coursework: Object Oriented Programming in Java and Python, Data Structures

Madison, NJ

May 2024

### Study Abroad: Alliance Française

*Completed coursework in French Culture and Language*

Paris, France

June–July 2022

## TECHNICAL SKILLS

*Programming Languages:* Java, Python, SQL, C, HTML, CSS, Java Script

*Frameworks:* Django, React js, Node js

*Tools:* Jupyter Notebook, Git, Tableau

*Databases:* MySQL, PostgreSQL

*Libraries:* Keras, TensorFlow, NumPy, Pandas

## RELEVANT EXPERIENCE

### Drew Summer Science Institute

*Machine Learning Researcher*

Madison, NJ

Jun 2023-present

- Lead research projects on fashion trend prediction by analyzing Vogue Runway photos and social media images using machine learning techniques such as object detection and image classification through the use of CNN models in order to identify common trends for consumers and brands therefore promoting sustainability in the fashion industry
- Apply LSTM models for time series analysis to predict fashion trends based on historical data from results obtained from computer vision analysis

### TechJoy

*SWE intern*

Madison, NJ

Jul 2023-present

- Implement CRUD operations with Cypress for end-to-end testing and integrating Heroku CI/CD for staging and production in order to ensure correct application performance for offroadfunfinder.com which is a bike racing application
- Refactor code using SWR for better data fetching in order to improve application usability for the offroadfunfinder.com

## PROJECT EXPERIENCE

### Fashion Trend Prediction

June 2023

- Developing a fashion trend prediction machine learning model through the integration of computer vision and LSTM time series analysis of clothing patterns, colors and silhouettes using Vogue Runway Collection images in order to promote sustainability in the fashion industry.

### Open AI Chatbot

April 2023

- Developed an AI chatbot by integrating Open Ai's API to generate responses based on user input
- Implemented user prompts, response handling and contextual conversational flow

## LEADERSHIP

### Technovation Women in STEM

*Board Member*

Nairobi, Kenya

Aug 2017-2018

- Helped coordinate tech meetups and network events for high school students in Kenya
- Volunteered to teach young girls how to code as part of encouraging them to join STEM fields