Anthony J. Barrera
Email: ajbarr116@gmail.com
Phone: 201-232-6304
LinkedIn: Anthony Barrera - https://www.linkedin.com/in/anthony-barrera-93a361190/
GitHub: AnthonyBarrera116 - https://github.com/AnthonyBarrera116
Website: https://anthonybarrera116.github.io/Ajbarr.github.io/
Age: 23

Education

Loyola University of Maryland — Baltimore, MD
B.S Computer Science — September 2023 - May 2023
Minor: Statistic — September 2023 - May 2023

New Jersey Institute of Technology — Newark, NJ
M.S Computer Science — September 2023 – December 2024

Professional Experience

USA Hockey — Various Rinks in NJ
Hockey Referee — July 2016 – September 2022

- 6 years' experience obtaining Level 3 certification (ages 5 to 18)
- Communicate professionally with players, coaches, and parents
- Ensuring all USA Hockey rules are implemented

Loyola University Maryland — Baltimore, MD
Information Technology Support Specialist — September 2019 – May 2023

- Analyze, troubleshoot, and evaluate technology issues for 5,000 students and 3,500 staff
- Provide support and assistance to keep campus technology optimized and running efficiently
- Streamline repair processes and update procedures for hardware and software
- Configured hardware, devices, and software to set up workstations for students and faculty.

New Jersey Institute of Technology — Newark, NJ
User Services Support Specialist — October 2023 – December 2023

- Analyze, troubleshoot, and evaluate technology issues for students and faculty on Campus
- Provide support and assistance to keep campus technology optimized and running efficiently
- Configured hardware, devices, and software to set up workstations for students and faculty.

Skills

- **Programming Languages (Advanced):** C, C++, JavaScript, Python
- **Programming Languages (Intermediate):** SQL, Java
- **Programming Languages (Basic):** Ruby, Solidity
- **Related Technology:**
  - **App**: React Native
  - **Website**: HTML, React.js
  - **Web 3:** Solidity, Hardhat, React.js
  - **Database:** Oracle, Mongo DB
  - **AI:** Pytorch, TensorFlow, Torch, Keras, Gym, Gymnasium, Sklearn

Projects

Software Engineering Project - https://github.com/AnthonyBarrera116/SEP-GROUP
Loyola University Maryland
September 2022 – December 2022
Mobile App – Recreational Football
- Mobile App for recreational football
- *Make Teams, Coaches, Players, Games*
- Tech stack: MongoDB, React Native, JavaScript

Senior Project
Loyola University Maryland
January 2023 – May 2023
FI320 Calculator Website - **https://github.com/AnthonyBarrera116/Senior-Project**
- *Calculator for Finance (Time Value of Money, Bonds, Stocks, Capital Budgeting)*
- *User, History, Calculations*
- Tech stack: MongoDB, HTML, JavaScript

Crypto Token Project - https://github.com/AnthonyBarrera116/Coin
Loyola University Maryland
January 2023 – May 2023
Making ERC-20 Token and Faucet - https://anthonybarrera116.github.io/Coin/
- *Website – Faucet to drip an ERC-20 token*
- *Deploying contract on Sepolia Testnet*
- Tech stack: Node.js, React.js, Solidity, Hardhat, JavaScript

Zoo Database - https://github.com/AnthonyBarrera116/DATA-Manage
New Jersey Institute of Technology
September 2023 – December 2023
Making of a zoo database of SQL, Front-End, Back-End and HTML Pages
- *Website for signing into database*
- *Several functions like adding new employee, animal and more*
- Tech stack: HTML, Python, XAMPP

AI-Stock Project - https://github.com/AnthonyBarrera116/AI-Stock
New Jersey Institute of Technology
January 2024 – May 2024
Making of Model to predict future stock
- *Two Scaler programs Standard and Min Max*
- *Four different Ideas of predicting future stock*
  - *Open Close*
  - *Open Close Sklearn*
  - *Open Up Down Close*
  - *Open High Low Close*

CNN Animal Classification - https://github.com/AnthonyBarrera116/Image-animal-classification
New Jersey Institute of Technology
May 2024 – August 2024
CNN Model making and testing between Own s a MobileNet
  - *CNN Model made from tensorflow GPU*
  - *CNN model using MobileNet*
  - *Animal Classification with Probability*

Apriori Algorithm, Brute Force, Association Rules - https://github.com/AnthonyBarrera116/Apiroi-Alg
New Jersey Institute of Technology
May 2024 – August 2024
Making of Association Rules using support and confidence of Apriori transactions
  - *Confidence Calculating*
  - *Support Calculating*
  - *Association Rules of Transactions*

K means and Hierarchical Clustering - https://github.com/AnthonyBarrera116/kmeans-Hierac-clustering/tree/main
New Jersey Institute of Technology
May 2024 – August 2024
K means clustering and Hierarchical from scratch and calculates silhouette
  - *K means clustering from scratch*
  - *Hierarchical clustering from scratch*
  - *Calculates silhouette and shows which is better*

Image classification using CNN model from Scratch - https://github.com/AnthonyBarrera116/Image-animal-classification
New Jersey Institute of Technology
September 2024 – December 2024
Making of CNN Model from scratch to classify animal images
  - *Making of CNN from scratch using Pytorch*
  - *Uses animal images of 90 different animals*

NLP BERT Study – https://github.com/AnthonyBarrera116/NLP-BERT-Study
New Jersey Institute of Technology
September 2024 – December 2024
Study of BERT, Logistic Regression, SVC and etc using Sklearn and building of BERT, Logistic and SVC from scratch
  - *Learning to build BERT, Logistic Regression, and SVC from scratch for Text Classification*
  - *Using Sklearn of BERT, Logistics Regression, SVC and other models*
  - *Study to make a better BERT from scratch versus sklearn library*

Courses

• *CS 496: Senior Project*	Loyola University Maryland
• *CS 482: Software Engineering*	Loyola University Maryland
• *CS 484: Machine Learning*	Loyola University Maryland
• *CS 489.01: Intro to Quantum Computing*	Loyola University Maryland
• *CS 489.02: Cryptos and Blockchain*	Loyola University Maryland
• *CS 403: Discovering Info in Data*	Loyola University Maryland
• *CS 479: Intro Microprocess-Based Systems*	Loyola University Maryland
• *CS 630: Operating Systems Design*	New Jersey Institute of Technology
• *CS 656: Internet and Higher Layer Protocols*	New Jersey Institute of Technology
• *CS 631: Data Management Systems Design*	New Jersey Institute of Technology
• *DS 669: Reinforcement Learning*	New Jersey Institute of Technology
• *CS 670: Artificial Intelligence*	New Jersey Institute of Technology
• *CS 610: Data Structures and Algorithms*	New Jersey Institute of Technology
• *DS 634: Data Mining*	New Jersey Institute of Technology
• *DS 675: Machine Learning*	New Jersey Institute of Technology
• DS 677: Deep Learning	New Jersey Institute of Technology
• DS 680: Natural Learning Processing	New Jersey Institute of Technology