

Anthony J. Barrera
ajbarr116@gmail.com | 201-232-6304
132 W. 31st St. Bayonne, NJ, 07002
LinkedIn: [Anthony Barrera - https://www.linkedin.com/in/anthony-barrera-93a361190](https://www.linkedin.com/in/anthony-barrera-93a361190)
GitHub: [AnthonyBarrera116 - https://github.com/AnthonyBarrera116](https://github.com/AnthonyBarrera116)
Website: <https://anthonybarrera116.github.io/Ajbarr.github.io/>

EDUCATION

Loyola University Maryland
Bachelor of Science in Computer Science
Minor in Statistics

Baltimore, MD
September 2019 - May 2023
September 2019 - May 2023

New Jersey Institute of Technology
Master of Science in Computer Science

Newark, NJ
September 2023 - December 2024

COMPUTER SKILLS

Languages (Intermediate-Advanced knowledge): Python, Java, JavaScript, C, C++
Related Tech: HTML, React Native, React.js, Pytorch, TensorFlow, Torch, Keras, Gym, Gymnasium, Sklearn, Oracle, Mongo DB, Solidity, Hardhat
Software: Skilled in Adobe photoshop, Adobe Premiere Pro, MobaXterm, Clion, IntelliJ IDEA, JetBrains PyCharm, jGRASP, Visual Studio Code, Android Studio, Oracle, XAMPP, SQL Developer, Arduino IDE
Operating Systems: Windows 10, Mac OS

COMPLETED COURSEWORK

Software Engineering/ Microprocessor-Based Systems/ Machine Learning/ Quantum Computing/ Cryptocurrencies and Blockchain/Computer Science Project / Discovering Information in data/ Operating Systems Design/ Data Management
Systems Design/ Internet and Higher layer Protocols/ Artificial Intelligence/ Reinforcement Learning/ Machine Learning/ Data Mining/ Deep Learning/ Natural Language Processing

PROFESSIONAL EXPERIENCE

USA Hockey

Hockey Referee

Various Rinks in NJ
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

Information Technology Support Specialist

Baltimore, MD
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

User Services Support Specialist

Newark, NJ
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.

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 - <https://github.com/AnthonyBarrera116/Senior-Project>

Loyola University Maryland
January 2023 - May 2023

FT320 Calculator Website

- 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 a ERC-20 token
- Deploying contract on Sepolia Testnet
- Tech stack: Node.js, React.js, Solidity, Hardhat, JavaScript

Zoo Database Project - <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/Apriori-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 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

Hockey Prediction of Games- <https://github.com/AnthonyBarrera116/Hockey-Predictions>

Personal Time
December 2024 - Ongoing (January 2025)

Web scraping data from Hockey Reference and training AI Model

- Using Beautiful Soup Libraries to Web Scrape Public knowledge of Hockey Reference
- Using Pytorch and nn layers to train model
- Organizing data from html file to make data frames