# Samrat Bojanola

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#### **EDUCATION**

## **University of Maryland, Baltimore County**

Masters in Computer Science

Baltimore, MD

Aug 2022 - Present

• Courses: Design and Analysis of Algorithms, Machine Learning, Advanced Computer Architecture, Informational Retrieval, Data Visualization, Management, Leadership and Communication.

#### **National Institute of technology**

Nagaland, INDIA

Bachelors in Computer Science and Engineering

Jul 2017 – Jun 2021

• Achievements: Awarded the best frontend designer in Ekarikthin at the National Institute of Technology, Nagaland.

#### **COURSE PROJECTS**

## **Twitter Spam and Bot Data Analysis**

Baltimore, MD

Master's Course Project (Data Visualization)

Aug 2022 – Dec 2022

- Developed a prototype for classifying Twitter spam bots using the Twitter API, analyzing over 10,000+ tweets to identify and filter out potential spam accounts, achieving an accuracy rate of 95%.
- Built an interactive front-end website using Typescript and Angular framework with 5 visualizations, increasing user engagement by 50% through user-friendly data exploration and visualization with Google Chart API.

Self-Driving Car

Baltimore, MD

Master's Course Project (Machine Learning)

Aug 2022 – Dec 2022

- Optimized real-time video analysis model using Nvidia's 2016 paper on self-driving cars.
- Upgraded the model with advanced methodologies such as dropout and truncated normal weight initialization, and removed max-pooling, resulting in a 90% boost in efficiency based on benchmark tests.

AI Trap Camera

Nagaland, INDIA

Bachelor's Course Project(Machine Learning)

Dec 2020 - June 2021

- Constructed an object detection program capable of identifying a wide range of objects, including humans, animals, and vehicles, using google's open image dataset of 9 million images.
- Conducted experiments with various object detection techniques and ultimately selected the YOLOv4 method to achieve 98% accuracy.

## PERSONAL PROJECTS

Portfolio Website (React)

Baltimore, MD

Dec 2022

Aug 2021

• Invested 50+ hours over 3 days on a single-page website using React enforcing the latest react practices.

• Used the React icon and emailis libraries to enhance the website's design and functionality.

Implemented responsive design using CSS media queries for compatibility across devices.

**Spotify clone (React)** 

Hyderabad, INDIA

Self-Paced

Self-Paced

Engineered a Spotify clone using Hooks, and Context API, resulting in a 50% increase in page load speed.

• Integrated the Spotify API to leverage features like searching for over 70 million songs, creating and managing playlists, and playing music.

# **Predicting Hospital Readmission for Patients with Diabetes**

Hyderabad, INDIA

Training and Intern under Smart Bridge Educational Services Pvt. Ltd

Dec 2018 – Jan 2019

• Explored a hospital readmission rate forecasting web interface utilizing Machine Learning concepts and IBM's technology, and discovered a 20% reduction in readmission rates among diabetic patients.

## **SKILLS & INTERESTS**

**Programming Languages**: C | C++ | Python | C# | Shell Scripting | Javascript **Web Development**: HTML | CSS | Bootstrap | React | DOM | Django | Flask

**Version Control**: GIT | GITHUB

**Database Management**: MySQL | Mongo DB **DevOps Tools**: Jenkins | Docker | Kubernetes

Cloud Services: AWS

**Interests:** Chess | Table Tennis | FPS Games | Science and technology enthusiast