

SARANG PATIL *(he/him)*

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EDUCATION:

University of Maryland Baltimore County, Baltimore, MD

Jan 2021 - Dec 2022

M.P.S. in Data Science, GPA – 3.97/4.0

Pune University, Pune, India

Jun 2016 - May 2020

Bachelor of Computer Engineering, GPA – 3.7/4.0

SKILLS:

- Python, Java, C, C++
- Machine Learning and Deep Learning Algorithms
- Data Science and Natural Language Processing Libraries
- MySQL, MongoDB
- Spark
- Hadoop
- Tableau

EXPERIENCE:

Graduate Research Assistant, *University of Maryland Baltimore County*, Baltimore, MD

Dec 2021 - Present

- Facilitated semantic localization of the user at home solely with the help of non-intrusive sensors
- Generated an Indoor Localization system that decreases the hardware costs by 50-60% approximately using non-intrusive sensors rather than the usual smart-home sensors
- Analyzed the energy/water/gas consumption data to predict the user's location at home

Graduate Research Assistant, *University of Maryland Baltimore County*, Baltimore, MD

Jan 2022 – May 2022

- Develop a non-intrusive smart home using Deep Learning
- Resolved issues in data having an imbalance of 80-20% by considering parameters like AUC and techniques like sampling
- Improve the results by experimenting with different parameters in the algorithms

Machine Learning Project Intern, *CoReCo Technologies*, Pune, India

Aug 2019 - Jun 2020

- Initiated a project implementing the Naïve Bayes model for detecting inappropriate tweets (Twitter API) having a prediction accuracy of 76% and precision of 89%
- Demonstrated the impact of different algorithms on data in more business terms and less technical jargon by mediating between the project team and management team
- Illustrated analytical data and graphs of sentiments on Twitter about a specific word or in general

Project Intern, *Aalborg University*, Copenhagen, Denmark

Jan 2018 - Feb 2018

- Managed a project team at Aalborg University regarding the Steam Game Distribution Platform
- Spearheaded Technical Analysis and Business Analysis of the project and designed innovation system architecture to satisfy the requirements of 47% of steam video game customers

PROJECTS:

Disease Diagnosing Chatbot and Hospital Recommender System

Jun 2022 – Aug 2022

- Diagnoses potential patients based on their symptoms with an accuracy of 75.89%.
- Expanded the project by introducing a collaborative recommendation system that recommends the nearest and best suitable hospital for the patient with certain medical conditions
- Designed a user-friendly chatbot interface using the Tkinter library

Steam Video Game Recommendation Engine

Jan 2022 – May 2022

- Developed a valuable resource for the game developers to better tailor game content to increase gamer engagement
- Recommending video games to customers based on a content-based recommendation system
- Leveraged soft cosine similarity technique trained over corpus to give more appropriate results to customers

Stock Market Prediction using the correlation between Twitter and Stock values

Jun 2021 - Dec 2021

- Collaborated with a team of 4 to predict future stock values of different companies based on Twitter data and previous stock market patterns
- Introduced company-specific stock values with Twitter data based on a date along with and without time lag inferring a confidence level of 95% in the correlation among Twitter data and stock market data

Weather Forecasting and Weather Data Analysis using ML Algorithms

Feb 2020 - Apr 2020

- Teamed with 3 students to design a project that predicts weather parameters such as temperature using historical data of temperature, humidity, and precipitation
- Analyzed Weather Data incorporating Time-series supervised learning which implemented LSTM and RFR with the mean absolute error being as little as 3.08 °F and 3.7 °F respectively

PUBLICATIONS:

- **"An Effective Analysis on Anti Troll System using Artificial Intelligence"**, International Research Journal of Engineering and Technology (IRJET), Volume: 09, Issue: 12, Dec 2019
<https://www.irjet.net/archives/V6/i12/IRJET-V6I12103.pdf>

CERTIFICATIONS:

- **"[Certified AWS Cloud Practitioner](#)"**, Amazon Web Services
- **"[Big Data Modelling and Management Systems](#)"**, UC San Diego
- **"[AWS Fundamentals: Going Cloud Native](#)"**, Amazon Web Services
- **"[Machine Learning](#)"**, Stanford Online

August 2022

May 2020

May 2020

March 2020