

Sarang Patil (he/him)

4760 Chapel Square, Halethorpe, MD 21227 | 443-527-7295 | sarangp2402@gmail.com

EDUCATION:

University of Maryland Baltimore County, Baltimore, MD

Jan 2021 - Dec 2022

Master's in Data Science, GPA – 4.0/4.0

University of Pune, Pune, India

Jun 2016 - Aug 2020

Bachelor of Computer Engineering, GPA – 3.7/4.0

EXPERIENCE:

Data Science Research Assistant, *University of Maryland Baltimore County*, Baltimore, MD

Dec 2021 – Dec 2022

- Contrasted machine learning approach with static rule approach to compare which approach performs better, found out that the ML approach gave 5 times more accurate results than the static rules approach
- Developed data structures and logic rules to capture and manage activity and location tracking of users
- Executed data manipulation and then carried out exploratory data analysis and statistical analysis of the manipulated data
- Implemented Keras and TensorFlow predictive models using Python 3.10 to semantically locate the user at home solely with the help of non-intrusive sensor data
- Analyzed the historical data of energy/water/gas consumption to draw inferences and predict the user's location at home and reduced hardware costs of sensors for data collection by 50-60% approximately by using non-intrusive sensors

Machine Learning Research Assistant, *University of Maryland Baltimore County*, Baltimore, MD

Jan 2022 – May 2022

- Developed a host-based intrusion detection system analytical model based on Pandas dataframe of more than 160000 training records for a smart home using Deep Learning frameworks such as Keras and TensorFlow
- Utilized SAS for data analysis and R for visualization dashboards
- Evaluated project by formulating hypothesis testing, ANOVA and carried out Ad Hoc Data Analysis
- Improved the results by experimenting with different parameters in the algorithms and visualized the results using Tableau
- Presented the project deliveries and milestones using Microsoft PowerPoint and made reports using Microsoft Excel

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

Aug 2019 - Jun 2020

- Initiated a project in an Agile team environment (SCRUM) implementing the Naïve Bayes model for detecting inappropriate tweets using Twitter API which had a prediction accuracy of 76% and precision of 89%
- Administered database management and data querying of approximately 2000 records using SQL Server
- 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

Student Intern, *Aalborg University*, Copenhagen, Denmark

Jan 2018 - Feb 2018

- Managed an SDLC project team as a student team lead at Aalborg University in Denmark regarding the Steam Game Distribution Platform
- Translated business questions into technical requirements while working with diverse audiences from overseas
- Spearheaded Technical Analysis and Business Analysis of the project and built innovative system architecture to satisfy the requirements of 47% of steam video game customers

SKILLS:

Languages: Python, R, Java; **OS:** Windows and Linux; **Machine Learning and Deep Learning:** TensorFlow, Keras, Torch, Spark MLlib; **Databases:** SQL, PL/SQL, NoSQL, MySQL, MongoDB; **Agile Methodologies:** Scrum, Kanban; **Packages:** Pandas, NumPy, Seaborn, Matplotlib, NLTK, Spark; **Cloud Computing:** AWS Cloud and Google Cloud; **Big Data:** Databricks, Apache Hadoop, Apache Spark; **Microsoft:** Word, Excel, Teams, PowerPoint; **Data Visualization:** Tableau and Streamlits; **Web Scraping:** Selenium

CERTIFICATIONS:

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

PUBLICATIONS:

- "[An Effective Analysis of Anti Troll System using Artificial Intelligence](#)", International Research Journal of Engineering and Technology (IRJET), Volume: 09, Issue: 12, Dec 2019