Sarang Patil *(he/him)*

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EDUCATION:

University of Maryland Baltimore County**,** Baltimore, MD **Jan 2021 - Dec 2022**
Mater'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%
- Administrated 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:

- **Machine Learning**, *Stanford Online*
- **Certified AWS Cloud Practitioner Essentials**, *Amazon Web Services*
- **Big Data Modelling and Management Systems**, *UC San Diego*
- **AWS Fundamentals: Going Cloud Native**, *Amazon Web Services*

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