

## EDUCATION

*University of Nottingham, United Kingdom*

Masters in Data Science

*Sep 2024-Present*

*Dr. A.P.J. Abdul Kalam Technical University, India*

Bachelor of Engineering in Electronics and Communication

*CGPA: 7.62*

*July 2022*

## PROFESSIONAL EXPERIENCE:

*Project Engineer*

*Wipro, India*

*April 2022 - June 2024*

- Engineered robust automated test scripts using Java and Selenium to ensure comprehensive coverage of critical application functionalities, effectively saving multiple hours of manual test time in each sprint.
- Implemented RESTful APIs using Spring Boot controllers to seamlessly retrieve and display data from databases, optimizing efficiency in data handling and presentation.
- Developed and implemented a Selenium Test Automation Framework to streamline script creation with TestNG, allowing for prioritization and controlled execution sequencing.
- Actively contributed to the design and implementation of a range of functionalities aimed at classifying financial data, ensuring efficient data management and analysis.
- Applied BDD principles using tools like cucumber to enhance collaboration between development and QA teams, resulting in more effective testing scenarios.

*Machine Learning Intern*

*Internity Foundation, India*

*June 2021 - July 2021*

- Led data collection and preprocessing efforts for the IMDb reviews dataset.
- Implemented several functions for stemming and converting text to numeric vectors and TFIDF for converting text to the matrix of its features.
- Contributed to the optimization of the model's performance and provided insights for potential enhancements.

*Data Science Intern*

*Internity Foundation, India*

*Dec 2020 - Jan 21*

- Collected and analyzed web server logs to identify and geolocate XSS(Cross-Site Scripting) attacks.
- Scraped and cleaned URL log data, applying rigorous Exploratory Data Analysis(EDA) techniques to derive meaningful insights.
- Significantly contributed to the enhancement of web server security through the application of advanced analytics.

## RELEVANT SKILLS:

Java, Python, Data Structure, OOPS Concept, Algorithm, Data Science, MySQL, Spring Boot, Automation, Jenkins, Git, Azure, Selenium, BDD Cucumber, Web Scraping, RESTful API

## PROJECTS:

*Deepfake audio Detection with Neural networks using Audio features*

*Jan 2022 - Apr 2022*

- Developed a CNN-based audio classification model for distinguishing between human speech and artificial voices.
- Trained the model using various audio features such as MFCC, STFT, FFT, and Mel Spectrogram extracted from audio signals.
- A dataset comprising 28,700 audio files of ASV(Automatic Speaker Verification) spoof data is utilized for training and testing the system model.

*Sentiment Analysis using Naive Bayes*

*June 2021 - July 2021*

- Implemented an NLP model using the Multinomial Naïve Bayes algorithm for sentiment analysis on the IMDb dataset, incorporating movie ratings as one of the features.
- Trained the model on the IMDb dataset, consisting of 25,000 reviews, to learn sentiment patterns and associations with movie ratings.
- Employed stemming, bag of words, and tokenization as distinct functions to extract features from the text. These functions were instrumental in converting the textual data into vectors, serving as features for the Multinomial Naïve Bayes algorithm.

***Stock Market Prediction using Lasso Regression With Time Lag******Feb 2021 - April 2021***

- Developed a predictive model for the closing prices of NIFTY50 stocks using advanced techniques, including the LASSO regression algorithm and the time lag technique.
- Implemented Lasso regression, leveraging its feature selection capabilities, and incorporated technical analysis indicators such as Relative Strength Index(RSI), Super Trend, Pivot Level, Support Level, and Moving Averages as crucial features.
- Applied the time lag technique to capture temporal dependencies in the stock market data.
- Proactively fostered a community of developers who actively contributed to the project, enabling continuous improvement and growth.

***Web Server Log Analysis******Dec 2020 - Jan 2021***

- A data science project that focused mainly on web URL log data with the primary goal of detecting Cross-Site Scripting(XSS) attacks initiated by users on the URL.
- Executed web scraping techniques to gather relevant data and applied exploratory data analysis to meaningful insights.
- Implemented several functions to visualize the customer geo locations, identify most and least visited webpages, and detect XSS attack attempts on the URL.
- Engineered algorithms to detect the operating systems and browsers associated with user-initiated GET requests, contributing to enhanced understanding and security measures.

**PUBLICATIONS*****Deepfake Audio Detection with Neural Networks Using Audio Features******(IEEE-2022)******Stock Market Prediction with Lasso Regression Using Technical Analysis and Time Lag******(IEEE-2021)*****CERTIFICATIONS**

- ***Microsoft Certified: Azure Data Engineer Associate*** ***Nov 2023***
- ***Microsoft Certified: Azure Data Fundamentals*** ***Jun 2023***
- ***Microsoft Certified: Azure AI Fundamentals*** ***Sep 2023***
- ***Huawei Certified ICT Associate in Artificial Intelligence*** ***Jun 2021***
- ***Huawei Certified ICT Associate in Routing and Switching*** ***Aug 2020***