SMRUTHI MEESALA

A passionate data scientist transforming complex datasets into actionable insights to solve real-world problems

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EDUCATION

University of California Los Angeles (UCLA) Oct 2023 – Jun 2025 (expected)
Master of Applied Statistics and Data Science

Birla Institute of Technology and Science (BITS) Pilani, Hyderabad Aug 2015 – Aug 2020
M.Sc. (Honors) Mathematics and B.E (Honors) Electrical & Electronics Engineering

TECHNICAL/ANALYTICAL SKILLS

Languages: Python, R, SQL, C, Java, MATLAB, C#
Data Analysis & Statistics**:** Python (pandas, NumPy, SciPy); R (dplyr, tidyverse, quadprog); SAS
Machine Learning: Python (PyTorch, scikit-learn); R (caret, randomforest, forecast, tseries)
Data Management & Cloud: SQL, AWS (S3, EC2, RDS)
Data Visualization: Python (matplotlib, seaborn); R (ggplot2, plotly); Tableau
Web Development: HTML, JavaScript, jQuery

PROFESSIONAL EXPERIENCE

Data Analyst - II at Epsilon India Apr 2022 – Aug 2023
Data Analyst - I at Epsilon India Sep 2020 – Mar 2022

- Planned, budgeted and executed an aftersales program for a luxury automotive brand with a customer base of around 13 million individuals, that focused on getting customers back for service after the sale of vehicle
- Customized and integrated a Gradient Boost Model provided by the data science team into the analysis pipeline, optimizing target selection for campaigns, which achieved a lift of 25% in customer service turn-up
- Utilized SAS and SQL to analyse omni-channel CRM(Customer Relationship Management) campaign performance and to find data-driven insights to improve strategy decisions
- Collaborated with the account team to implement numerous A/B tests to enhance lead targeting and optimize offers

ACADEMIC PROJECTS

Master's Thesis: Deep Learning for EEG Signal Analysis in Cognitive Decline Studies, UCLA Jan 2025 – Present

- Extracted features from EEG recordings to classify dementia types using Multilayer Perceptron (MLP) with 75% accuracy
- Implementing ResNet architecture for direct signal processing, eliminating manual feature extraction while improving classification performance

LLM based Synthetic Data Generation for Ad-Click Prediction, UCLA Jan 2025 – Mar 2025

- Evaluated synthetic ad-click data fidelity and utility by generating samples using GPT-3 and DistilGPT-2 via REalTabFormer. Demonstrated that a 50% synthetic/real mixture maintained Catboost model performance despite computational constraints

Machine Learning for Spam Email Classification , UCLA Jan 2024 – Mar 2024

- Built and evaluated multiple classification models (Logistic Regression, Random Forest, AdaBoost) for spam detection on UCI Spambase dataset, achieving 94.6% accuracy with optimized Random Forest model through cross-validation and GridSearch

Master's Thesis: Nabla Calculus for Boundary Value Problems, BITS Hyderabad Aug 2019 – Dec 2019

- Established existence of solutions for boundary value problems in discrete fractional calculus by extending continuous calculus results and deriving Green's functions for second order difference equations using Nable Calculus theorems.

INTERNSHIPS

Ernst & Young Global Delivery Services, Bangalore Jan 2020 – June 2020

- Worked on valuation of derivatives using market data and financial modelling tools like FINCAD
- Developed the stochastic Hull White Model in Python to simulate future interest rates and explore its potential application in valuing Constant Maturity Swap derivatives

Microsoft India R&D Pvt Ltd., Hyderabad May 2019 – July 2019

- Worked with the System Center Operation Manager on an app to monitor the health of critical applications in an enterprise
- Developed software in Angular JS, C# and REST API to migrate to a desktop application to a web console

Institute for Development and Research in Banking Technology, Hyderabad May 2018 – July 2018

- Collaborated with a team of three to design and optimize a Differential Evolution (DE) trained Fuzzy Cognitive Map (FCM) in R, to predict the efficiency of banking operations using key financial ratios

FTD India, Pvt Ltd., Hyderabad May 2016 – July 2016

- Worked on web development of floral eCommerce websites using HTML, CSS, Java Scripting and Jquery

PUBLICATIONS

- Jaya Krishna G., Smruthi M., Ravi V., Shandilya B., "Differential Evolution Trained Fuzzy Cognitive Map: An Application to Modelling Efficiency in Banking", *International Conference on Intelligent Systems Design and Applications*, Vellore, India, December 2018.

AWARDS

- Awarded the National Talent Search (NTS) Scholarship by the Government of India in 2010. This highly competitive scholarship is awarded annually to 1,000 students across the entire country.