

Harshwardhan Raghunath Patil

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Education

Master of Science in Computational Science

August 2022 – December 2023

Indiana University, Bloomington

Indiana, USA

Highlight : Vice-President and Director of Public Relations, Data Science Club at Indiana University

Secretary, IEEE Indiana University Student Branch

Certifications : Google Certified Advanced Data Analytics Professional

Coursework : Statistics, Algorithms, Machine Learning, Cloud Computing, Exploratory Data Analysis

Technical Skills

Languages	: Python, R
Database Management	: PostgreSQL, MongoDB, BigQuery
Frameworks	: Numpy, Pandas, PyTorch, TensorFlow, Flask, Django
Web Frameworks	: Node.js, React
ML Algorithms	: Regression, Classification, Clustering, Neural Networks, Decision Trees, Random Forests
Statistical Analysis	: Descriptive Analysis, Hypothesis Testing, A/B Testing, Probability Theory, Statistical Inference
Data Visualization	: Tableau, PowerBI
Miscellaneous	: Linux, Git, GCP, Docker, Kubernetes, Hadoop, Spark

Experience

Research Assistant

May 2023 – Present

Developmental Cognitive Neuroscience Lab, Indiana University, Bloomington

Indiana, USA

- Collaborated with a team of 5 researchers in the Neuroscience Lab to investigate the use of physiological signals in predicting risk levels and performance outcomes in a risky decision-making task using the Iowa Gambling Task (IGT).
- Contributed to the interpretation of results and provided insights into the relationship between physiological signals and decision-making performance.

Research Assistant (Remote)

May 2023 – Present

UNM Anderson School of Management, New Mexico

New Mexico, USA

- Engaged in a research project under the guidance of Professor Minkyung Koo, focusing on coupon use, discount, and deal proneness, by critically reviewing over 40 research papers.
- Systematically identified and extracted pertinent information from the papers, including dependent variables, independent variables, mediators, moderators, and main observations.

System Engineer (Remote)

November 2020 – July 2022

Infosys Limited, Bangalore

Karnataka, India

- Modified ETL process scripts which improved the efficiency and performance of the data pipelines by 30%.
- Designed and developed PL/SQL scripts to collect and analyze data from more than 50 networking infrastructures systems.
- Collaborated with the IT team to implement automation for scheduling and monitoring data pipelines, resulting in improved operational efficiency and timely issue detection and alerts.

Projects

Exploring Machine Learning Techniques for Sales Forecasting at Walmart Stores

- Leveraged data analysis and visualization tools to investigate trends, patterns, and correlations in the historical sales data, holiday events, and store information data.
- Utilized random forest, XGBoost, and ensemble algorithms to predict weekly sales for 45 Walmart stores.

Data-driven Customer Segmentation for Personalized Marketing

- Conducted customer segmentation project for a grocery store using K-means clustering to segment customers based on their purchase behavior, such as the frequency and amount of their purchases.
- Performed exploratory data analysis and visualized the results of the analysis using R's visualization packages, such as ggplot2 and plotly, to present insights.

Employee Attrition Analysis

- Conducted descriptive and predictive analytics to gain insights into the key drivers associated with employee attrition.
- Developed models to assess the likelihood of employee turnover and explored potential interventions to mitigate attrition.