NITHYA SHARMA

PROFESSIONAL EXPERIENCE

Betamonks Technology Factory Pvt Ltd

Chennai, India

Ir. Data Engineer (On-Site)

Feb 2025 - Present

- Architected and delivered a full-scale data analytics platform from scratch to visualize and monitor real-time insights from sensor-driven data streams.
- Developed efficient RESTful APIs using FastAPI for seamless data ingestion and retrieval, achieving >99% uptime and low-latency performance.
- Created interactive dashboards in React with advanced visualizations (scatter plots, histograms, KPIs, and timelines) using Nivo and Chart.js libraries.
- Displayed critical business KPIs such as real-time performance metrics, usage patterns, and behavioral trends empowering stakeholders to make data-informed decisions.

Software Engineer Intern

Sep 2024 - Feb 2025

- Developed Android mobile applications using React Native, focusing on UI/UX enhancements and modular feature development.
- Optimized component reusability and modularity, reducing code redundancy by 35% across the mobile codebase.

TVS Electronics Limited

Bengaluru, India

Product Solutions Intern

May 2023 - April 2024

- Spearheaded the design and development of new features across 3 live Android applications, boosting user engagement and improving app accessibility.
- Collaborated with cross-functional teams in agile sprints, contributing to 15+ feature planning discussions and maintaining detailed documentation for seamless development cycles.
- Developed and optimized key modules in TVSE ePay, resulting in a 20% improvement in enhanced UI responsiveness.
- Conducted end-to-end testing for mobile and web applications, identifying and resolving 100+ bugs, significantly enhancing app stability and performance

EDUCATION

Integrated MTech. Computer Science and Engineering with Specialization with Business Analytics

Jul 2019 - Jun 2024

Vellore Institute of Technology

CGPA: 8.11/10.0

SKILLS

Technical: Data Analysis, Data Engineering, Business Intelligence, Data Warehousing, Machine Learning

Programming Languages: Python, R, SQL, Java, JavaScript, HTML, Kotlin

Frameworks & Tools: React Native, React, Apache Solr, Android Studio, MySQL

Visualization & BI Tools: Power BI, Tableau, Excel

Other: Analytical Thinking, Problem-Solving, Agile/Scrum Methodologies

PROJECTS

Transaction Fraud Detection, Machine Learning

- Implemented supervised learning algorithms to classify financial transactions as genuine or fraudulent.
- Trained on a dataset containing anonymized customer transactions with class imbalance handling via SMOTE.
- Achieved a precision of 96.4% using Random Forest and 97.1% using XGBoost.
- Deployed confusion matrix and ROC-AUC metrics for evaluation, reducing false positives and minimizing client financial loss.

HR Employee Churn Prediction Analytics, Predictive Analytics

- Built a predictive model to assess employee attrition risks using historical HR data including satisfaction levels, evaluations, and work hours.
- Tested multiple classifiers including Logistic Regression, Decision Trees, and Random Forest.
- Best model yielded 94.7% accuracy and helped identify key churn indicators, enabling targeted retention strategies.

Web Phishing Detection, Classification Models

- Developed a phishing detection engine using a dataset of over 11,000 URLs labeled as legitimate or phishing.
- Extracted 30+ features including URL length, presence of HTTPS, and anchor tag behavior.
- Achieved 98.2% classification accuracy using a Gradient Boosting Classifier. Enabled real-time detection in browser
 extensions.

CERTIFICATES

- Google Advanced Data Analytics Professional Certificate (2024) Google
- BUSINESS ANALYST (2024) Finlatics
- Prompt Engineering for ChatGPT (2023) Coursera
- Neural Network and Deep Learning(2022) <u>DeepLearning.Al</u>
- Google Cloud Fundamentals: Core Infrastructures (2021) Google Cloud
- Data Science Python, Statistics and Predictive model, (2021) Intershala