

VISHAL KUMAR A

AI ENGINEER | DATA SCIENTIST | SOFTWARE DEVELOPER

ABOUT ME

AI Engineer & Software Developer specializing in AI first applications, data science, and automation. Experienced in building end-to-end machine learning pipelines, backend systems, and data processing workflows that transform raw R&D and operational data into actionable insights. Hands-on with Python, SQL, Flask, Pandas, NumPy, scikit-learn, TensorFlow, PyTorch, Power BI, and REST APIs. Comfortable working with LLMs, NLP, GenAI, and predictive analytics through projects and coursework. Strong at translating business requirements into AI-driven solutions, improving productivity, data quality, and decision-making while following AI ethics and best practices.

WORK EXPERIENCE

Data Analyst Intern — JK Tyres 3 Months

Automated PDF-to-Web-to-Excel data pipelines, reducing R&D processing time by 70% and improving data quality.

- Built Python + Flask tools to convert unstructured PDF data into structured Excel/SQL formats.
- Implemented real-time validation, monitoring, and error handling for experimental workflows.
- Processed large R&D datasets using data cleaning, preprocessing, and predictive analytics techniques.
- Collaborated with cross-functional teams to align solutions with business needs using agile practices.

Software Developer (FREELANCING)

EmailOnBusiness 1 year 9 months

- Built a high-performance, distributed email verification platform handling 100K+ parallel checks using Python, Flask, Celery, and message queues.
- Implemented multi-layer verification: SMTP, MX/DNS, SPF/DKIM/DMARC, catch-all detection, and risk scoring for enterprise accuracy.
- Developed dashboards and KPIs to track domain quality, bounce risk, and verification insights.
- Built authentication, role-based access, billing logic, and admin dashboards for the SaaS platform.
- Deployed and maintained secure Linux servers with Nginx, Unicorn, SSL, DNS, and basic system hardening.



CONTACT

Phone : +91 7760752108

Email : vishalkumara.vka@gmail.com

Github : <https://Vishalkumar-tech>

linkedin : <https://www.linkedin.com/in/vishalkumara>

SKILLS

Programming & Development

Python (Pandas, NumPy, Flask, scikit-learn, TensorFlow, PyTorch, Regex, BeautifulSoup, PyPDF2, OpenPyXL), SQL, HTML5, CSS3, JavaScript, REST APIs, Object-Oriented Programming (OOP)

Web & Full-Stack Development

Front-end: HTML, CSS, basic JavaScript
Back-end: Flask, REST APIs, Server-side Logic, Authentication, Admin Dashboards
Deployment: Linux, Nginx, Unicorn, SSL, DNS, Docker (basic), CI/CD (basic)
Cloud & MLOps: AWS/Azure (basic exposure), Model Deployment, MLOps practices, Model Monitoring

Data Science & Machine Learning

Supervised & Unsupervised Learning (Regression, Classification, Decision Trees, Random Forest, XGBoost, K-Means, PCA)
Experience with LLMs, NLP, and GenAI through projects (sentiment analysis, text classification).

Model development lifecycle: data cleaning, feature engineering, training, validation, and evaluation using metrics such as accuracy, F1-score, precision/recall, RMSE.

EDUCATION

JSS Science and Technology University, Mysuru

MSc in Data Science

Garden City University, Bengaluru

Bachelor's Degree in Data Science and Cybersecurity

St. John's High School

ICSC - 10th

National Pu College

PCMB - 12th

PROJECTS

Real-Time Email Verification System

- Built a distributed verification platform with parallel workers, reducing latency and providing real-time dashboards for queue and domain analysis.

Semi-Automated Web Data Capture Tool

- Developed a tool allowing users to highlight form inputs and map them directly to Excel, automating repetitive workflows.

Bulk PDF-to-Excel Extraction System

- Created scalable PDF parsing logic for extracting text, fields, and tables, integrated with a web UI for validation and Excel export.

Sales Insights Dashboard (Power BI)

- Designed interactive Power BI dashboards analyzing ₹984M+ sales, highlighting top regions and products using advanced DAX measures and KPIs to support management decisions.

Multi-Source Student Performance Predictor

- Built a model that predicts student performance by combining attendance logs, assignment scores, emotional/behavioral survey data, and digital learning activity. Identified key performance factors using feature importance analysis.
- Implemented using scikit-learn (Random Forest/XGBoost) with feature importance analysis.

Student Feedback Sentiment Analyzer

- Scraped anonymous student feedback and used NLP techniques (VADER/TextBlob, basic LLM experimentation) to classify sentiments related to teaching, infrastructure, and curriculum. Produced insights and dashboards for department improvement.

DECLARATION

I declare that the information provided is true to the best of my knowledge.

Signature
Vishal Kumar A