Abhijeet Kumar

Data Engineer | AI Solutions Developer | Full Stack Developer | Github | Portfolio

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Professional Summary

Results-driven Computer Science postgraduate (MSc, University of York) with hands-on expertise in data engineering, AI/ML, and high-performance computing. Proven success in automating business processes, forecasting demand using time-series models, and deploying generative AI solutions on the cloud. Passionate about building scalable, production-ready systems that convert complex data into actionable insights and measurable outcomes.

Experience

- **System Administrator (MIS & Data Engineering)**
  Kalawati Enterprises (P&G Partners) | 2024 – Present

- Automated daily sales and inventory reports using Python (Pandas, NumPy), reducing manual workload by 60%.
- Conducted trend analysis on multi-regional sales data, contributing to 30% growth in targeted product performance.
- Designed and implemented ARIMA and LSTM models for accurate demand forecasting.
- Built custom MIS dashboards for stakeholders, enhancing visibility and decision-making using internal KPIs.

Project Highlights

- **Route Optimization & Allocation Tool - Professional Project (Github)**
  Python, Pandas, Scikit-learn, Geospatial Algorithms, Tkinter, TTKBootstrap

- Automated assignment of uncovered locations based on distance threshold and business rules (e.g., prefix enforcement, distributor limits).
- Significantly reduced manual effort and errors in route mapping by over **90%**, improving field coverage efficiency.

- **Portfolio site – Personal Project (Github)**

- Developed a fully responsive personal portfolio using **React + Tailwind**, showcasing AI, Data Engineering, and Python projects.
- Integrated **Framer Motion** for smooth animations and used **Vite** for fast build and development workflow.

- Tech: React, node.js, React, Tailwind CSS, Vite, Framer Motion, GitHub, Vercel

➢ **Autonomous Robot Navigation Simulator – Academic Project (UOY)**

- Developed a ROS-based simulation using Gazebo + TurtleBot, implementing dynamic obstacle avoidance.
- Tech: ROS, Python, Gazebo, C++, Linux

➢ **High-Performance Parallelization for Scientific Code – Academic Project (UOY)**

- Optimized legacy code using CUDA & MPI, achieving 30x speed-up over serial baseline.
- Benchmarked performance using OpenMP vs CUDA frameworks.
- Tech: CUDA, MPI, OpenMP, C/C++

➢ **AI-Driven Snake Game Automation – Personal Project (Github)**

- Trained a neural network agent using genetic algorithms, achieving scores >100 after 500 generations.
- Tech: Python, Neural Networks, Genetic Algorithms

Education

➢ **University of York, UK**

MSc in Advanced Computer Science | Sept 2022 – Feb 2024

Modules: High-Performance Computing, Evolutionary Computation, User-Centered Design, Model-Driven Engineering

➢ **Savitribai Phule Pune University, India**

Bachelor of Engineering in Computer Engineering | Aug 2015 – Feb 2020

Courses: Software Development, OOP, Operating Systems, Engineering Mathematics

Technical Skills

➢ **Languages & Frameworks:** Python, C++, SQL, JavaScript, HTML/CSS, Flask, Django, React, Vite, Tailwind CSS, Hugging Face Transformers, Scikit-learn, Pytorch

➢ **Data & AI:** Pandas, NumPy, Scikit-learn, TensorFlow, ARIMA, LSTM, Neural Networks, Genetic Algorithms, LLM, NLP, CNN, RAG, AgenticAI, LangChain, OpenCV, ML, LLaMa

➢ **Tools & Platforms:** Git, Jupyter, Docker, AWS EC2, FastAPI, VS Code, Eclipse, ROS

➢ **Cloud & DevOps:** CI/CD Pipelines, Cloud Storage, Docker Containers, Prompt Engineering