Pulkit Dhingra

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Bristol, United Kingdom

As a Programmer, I have a diverse range of interests, including software development and machine learning. I possess expertise in multiple programming languages and tools. I have worked on various complex projects, utilizing advanced technologies and exploring unique approaches to problem-solving. A team player with a positive attitude, I'm always eager to learn and contribute towards maintaining a collaborative work environment.

EDUCATION

University of Bristol, Bristol, United Kingdom Sep 2025
Msc Data Science

- Conducted comprehensive analysis of energetic particle measurements from meteorological balloon flights—performing data extraction and instrument corrections, generating altitude- and latitude-dependent flux profiles, applying solar-cycle and atmospheric adjustments, and correlating results with satellite observations.
- Completed research project that includes analysis of spectroscopical result of crop plant for nutrient estimation using various Machine Learning and Deep Learning based models.
- Runner-up at University of Bristol Bris-Hack hackathon for innovative coding and ML algorithms.

Dr A.P.J Abdul Kalam Technical University, Lucknow, India Jun 2022
Bachelor of Technology Computer Science

- Maintained a high GPA of 7.9/10, demonstrating a strong understanding of the material and a dedication to academic excellence.
- Secured first place in the annual coding and machine learning competition by designing and optimizing innovative algorithms.

WORK EXPERIENCE

Ford Motor Company, *Data Scientist*, Chennai (1 year 8 months) Jan 2023 – Aug 2024

- Collaborated with the Supply Chain Analytics team to architect and execute highly efficient data-driven pipelines, enabling real-time monitoring and optimization of the supply chain operations.
- Conducted advanced analytics on supply chain data, uncovering trends that improved inventory management and supported pricing decisions.
- Designed and deployed machine learning models to forecast demand, resulting in a 10% reduction in overstock and stockout costs.
- Created and personalized interactive dashboards, providing essential insights for business teams, thereby aiding in strategic decision-making and leading to improved business outcomes in the supply chain.
- Implemented machine learning algorithms to forecast future demand, leading to a reduction in stockouts and overstock situations, and improving overall operational efficiency.
- Worked closely with cross-functional teams to translate business needs into technical requirements, ensuring the successful deployment of data science projects that aligns with company's strategic goals.

Nagarro, *DevOps Engineer*, Lucknow (9 months) May 2022 – Jan 2023

- Successfully integrated pipelines with Azure Cloud, AWS Cloud, and Google Cloud services, thereby automating application deployment and infrastructure management which led to a significant increase in team efficiency and a marked reduction in deployment errors.
- Utilized Infrastructure as Code (IaC) principles to create Terraform scripts, enabling automated creation and configuration of cloud infrastructure. This initiative prompted easy replication and standardization of environments, enhancing operational efficiency.
- Transformed the system architecture by designing and implementing containerization solutions with Docker and Kubernetes, leading to a 35% improvement in scalability and resource utilization.
- Implemented continuous integration and continuous delivery (CI/CD) pipelines using Jenkins and Git, drastically reducing the code integration time and improving code quality by 40%.

Shashwat Foundation, *Data Science and AI Trainer - Internship* (4 months) Jan 2021 – April 2021

- Served as a mentor for students from government schools in the Responsible AI For Youth Program, an initiative by the Government of India to introduce Artificial Intelligence to students.
- Guided students in building Machine Learning and data science projects in the domains of Natural Language Processing and Computer Vision, fostering their skills and interest in AI.
- Provided instruction and mentoring on basic machine learning concepts, enabling students to gain practical experience and knowledge in this field.

SKILLS

Technical Skills: Automation, data analysis, data modeling, data pipelines, database management, data architecture, data engineering, high-performance computing, cloud computing, applied machine learning, AWS cloud, Google Cloud Platform, Jenkins, CI/CD pipeline.

Programming Skills: Python, R, SQL, Git, HTML, JavaScript, Java, CSS, Rest-API, BigQuery, Terraform.

Frameworks & Tools: Torch, TensorFlow, Hugging Face, Django, Flask, pandas, numpy, StreamLit, plotly, matplotlib, Airflow, Tableau, Qlik Sense, Power BI, JIRA, Docker, Kubernetes.

RESEARCH PAPERS AND ARTICLE CONTRIBUTIONS

Sketch to Face [Link] Nov 2022

- The paper introduces a new method leveraging Generative Adversarial Networks (GANs) for enhanced visual representation tasks.
- The method eliminates the need for specialized artists or manual sketching processes.
- Users can create freehand sketches that serve as input for the model. The GAN model generates coloured images based on the provided sketches.

Glass Identification using XG-Boost [Link] Aug 2021

- The paper presents a method for analysing the chemical composition of glass particles.
- The method enables the classification and separate analysis of multiple glass fragments based on their unique chemical composition.
- It provides valuable information to identify the source and origin of the glass fragments.

Technical Writer @GeeksForGeeks [Link]

- Contributor on Geeks-for-Geeks with 15+ articles.
- Contributions focused on topics related to Python, R, and Machine Learning.

PROJECTS

Agentic-AI Documentation Generation [Link] **Agentic-AI, LangGraph, LLMs**

- Leverages Agentic-AI to automagically transform Python code into rich HTML docs detailing its methods and algorithms and generate contextual blog-style narrative descriptions.

HindiGPT-Neo 2.7B [Link] **LoRA Fine-Tuning, Conversational AI**

- Integrated lightweight LoRA adapters into GPT-Neo 2.7B fine-tuning pipeline on Wikipedia-sourced Hindi language data, creating an efficient LLM for context aware Hindi conversation.

Price Trends in e-commerce [Link] **Spark, SQL, Analytics**

- This projects targets analysing data from e-commerce space (sources :- Kaggle, eBay). Projects includes cleaning, validating and performing analytics on large scale (big) data leveraging spark framework.