

KABIR KAKKAR

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EDUCATION

Carnegie Mellon University

Pittsburgh, PA | Aug 2024 – Dec 2025

Master of Information System Management

Relevant Modules: Programming in Java, Distributed Systems, Database Management, Statistics, Measuring Social, Decision Making Under Uncertainty, Agile

Manipal University Jaipur

Rajasthan, India | June 2017 – June 2021

Bachelor of Technology (BTech) in Computer and Communication Engineering

Relevant Modules: Python Programming, Data Science, Engineering Mathematics, Machine Learning, Natural Language Processing

SKILLS

Programming Languages: C++, C, Python (Pandas, NumPy, Scikit-learn), Java, SQL

Tools & Technologies: Power BI, Jupyter Notebook, MS Office Suite (Word, Excel, PowerPoint)

Cloud & DevOps: AWS, Terraform, CI/CD Pipelines, Docker

Data Science & Machine Learning: Statistical Modeling, Regression Analysis, Time-Series Forecasting, Predictive Analytics, Feature Engineering, Data Wrangling, Supervised & Unsupervised Learning, Model Evaluation & Optimization

PROFESSIONAL EXPERIENCE

Accenture

Noida, India | Nov 2022 – May 2023

Custom Software Engineering Associate

- Partnered with clients to optimize cloud-based DevOps solutions, enhancing operational efficiency.
- Performed data cleaning on customer engagement data to ensure accuracy for business performance insights.
- Developed and maintained automated CI/CD pipelines, reducing infrastructure costs by 10%.
- Applied Infrastructure-as-Code (IaC) principles using Terraform to streamline deployment and system scaling.
- Conducted research on emerging technologies, optimizing system performance and data reliability.

Accenture

Noida, India | May 2021 – Nov 2022

Associate Software Engineer

- Modernized legacy infrastructure using Terraform, AWS, and Docker, reducing deployment time by nearly 30% through automation.
- Collaborated with cross-functional teams to design and implement data pipelines for seamless API and UI integration.
- Applied Agile DevOps methodologies to optimize software release cycles and improve system reliability.
- Ensured uninterrupted data accessibility, minimizing downtime to less than one day.

Celebal Technologies

Jaipur, India | Jan 2020 – June 2020

Associate Data Engineer, Internship

- Engineered a machine learning model for real-time demand forecasting using historical sales data, enhancing predictive accuracy to 86%.
- Conducted rigorous comparative analysis of multiple machine learning models, optimizing performance and ensuring robust predictions.
- Performed extensive data preprocessing, including eliminating low-correlation features, handling missing values, and refining datasets for improved model reliability.
- Used time-series analysis to extract meaningful insights and developed an interactive Power BI dashboard, enabling data-driven decision-making and strategic business improvements.

PROJECTS AND PUBLICATIONS

Research Paper: Implementation of Demand Forecasting – A Comparative Approach

Jaipur, India | Jan 2021

- Collaborated with team to research efficiency of machine learning models that could be used to project future sales for a consulting firm with an accuracy of 89%.
- Published academic journal in IOP Science, which explores demand forecasting and presents a comparative approach to this crucial aspect of business planning.

Entrepreneurial Innovation Hackathon

Jaipur, India | Nov 2019

- Led a team to first place in the "MUJ Entrepreneurial Innovation" hackathon, competing against multiple teams in an overnight challenge focused on data-driven solutions.
- Developed a predictive analytics platform using machine learning models to analyze historical business trends and forecast future revenue, aiding companies in decision-making.

EXTRA-CURRICULAR & POSITIONS OF RESPONSIBILITY

- Partnered with L'Oréal as a strategic consultant as part of my course Measuring Social, a course that I am currently undergoing at Carnegie Mellon University to work on a social media analytics project from January 2025 till May 2025.
- Tutored students in mathematics as a Math Tutor at PLUS Math Tutor, Carnegie Mellon University, reinforcing core concepts and improving academic performance.
- Served as Treasurer of Rotaract Green Club from 2019 to 2020, overseeing financial operations of day-to-day activities within my Rotary Division and managing budget allocations.
- Data Science Lead Instructor at 180 Degrees Consulting MUJ, where I taught predictive modeling, statistical analysis, and machine learning concepts to students.