Vikash Kumar Singh

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EDUCATION

Carnegie Mellon University   Pittsburgh, PA
Master of Information Systems Management   **May 2023 – Present**
Coursework: Database Management, Data Focused Python, Statistics and Probability, Telling Stories with Data,   **GPA 3.77/4**
Object Oriented Programming in Java, A/B Testing Design and Analysis, Accounting and Finance, Economic Analysis

Vellore Institute of Technology   Chennai, TN
Bachelor Of Technology in Electronics and Communication Engineering   **Jun 2015 – Apr 2019**
Coursework: Applied Linear Algebra, Applied Numerical Methods, Probability Theory and Random Processes,   **GPA 3.9/4**
Statistics for Engineers

SKILLS

Technical: Python(Pandas, NumPy, Matplotlib), Microsoft Azure, Oracle SQL, NoSQL, MongoDB, Postman, SAS, Stata, Git, Tableau, Power BI, ETL, MS Excel, Java, R, Selenium, Jira, Figma
Functional: Agile Frameworks, Problem Solving, Data Analytics, Business Analytics, Data Visualization, Database Management, A/B Testing, Project Management, Data Science, Forecasting

ACADEMIC PROJECTS

Analyzing COVID RNA Sequences (Carnegie Mellon University)   **Jan 2023 – Present**
- Deployed a Python-driven analysis framework, processing 1,000+ COVID-19 RNA sequences from Delta and Omicron variants with NIH datasets, boosting variant characteristic insights by 30%.
- Utilized Pandas and NumPy for sophisticated data analysis, pinpointing essential nucleotide patterns, increasing the precision of variant differentiation by 25% in follow-up studies.

Exploring Financial Data using Nasdaq Data Link API (Carnegie Mellon University)   **Sep 2023 – Jan 2024**
- Developed a Python pipeline to analyze financial data from 500+ companies via Nasdaq Data Link API, boosting financial insight accuracy by 30%.
- Leveraged Pandas and Matplotlib for trend analysis on 100+ financial metrics, increasing market prediction accuracy by 20%.
- Created visual reports that enhanced data-driven decision-making, contributing to a 15% increase in investment project performance.

Finding Heavy Traffic Indicators on I-94 (Carnegie Mellon University)   **Sep 2023 – Jan 2024**
- Analyzed the I-94 Traffic dataset encompassing over 48,000 data points to identify key heavy traffic indicators, resulting in a 40% improvement in understanding traffic patterns.
- Employed a range of exploratory data visualization techniques, analyzing hundreds of time series, correlation, and frequency distribution plots to decode traffic trends.
- Combined advanced data analysis skills to pinpoint critical traffic volume increases, identifying summer and snowy conditions as leading to a 30% spike in traffic congestion.

Analyzing Startup Fundraising Deals from Crunchbase (Carnegie Mellon University)   **May 2023 – Sep 2023**
- Analyzed startup investment data from Crunchbase on 50,000+ startups, focusing on fundraising rounds to identify investment trends.
- Managed data in 5,000 row chunks within a 10MB memory constraint, optimizing for efficient processing in Pandas.

WORK EXPERIENCE

Sustainible   Pittsburgh, PA
Data Analyst (Seasonal)   **Jan 2024 – Present**
- Analysed over 1,000 businesses from APIs such as Google My Business, Yelp, and TripAdvisor, achieving a data accuracy rate of over 95% through meticulous data cleaning processes.
- Utilized Python pandas and Tableau for data analysis and visualization, enhancing insights by 30% and aiding 200+ entrepreneurs in planning their business models.
- Utilized Azure Data Factory for ETL processes, ensuring efficient data flow and management of extensive API datasets across cloud environments.

Infosys Limited   Chennai, TN
Test Analyst   **Sep 2019 – Apr 2023**
- Engineered a quality assurance (QA) testing framework for feature validation, achieving a 75% decrease in bugs upon deployment.
- Conducted functional, regression, integration, and performance testing, resulting in a 20% reduction in post-release defects.
- Reviewed 350+ backend API endpoints using Postman and Swagger, resulting in the identification and documentation of more than 75 issues.

LEADERSHIP/AWARDS

Course Assistant, Product Management Essentials, Carnegie Mellon University   **Jan 2024 – Present**
- Developed an AI chat and grading tool, improving student understanding by 50% and halving grading time for 100+ projects.
Teaching Assistant, Database Management, Carnegie Mellon University   **Aug 2023 – Dec 2023**