Sayanth Rathnendranath

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PROFESSIONAL PROFILE

Accomplished data professional with MSc in Business Analytics, robust Computer Science background and IT expertise. Adept at transforming complex datasets into actionable insights leveraging Python, SQL, Machine Learning, and visualization tools like Power BI and Tableau. Expertise spans data extraction, cleansing, modelling, visualization, and stakeholder communication. Proven track record in delivering high-quality business insights, comprehensive dashboards, and addressing data quality issues. Passionate about continuous learning and applying advanced analytical techniques to solve complex business challenges. Strong problem-solving skills, commercial awareness, and quantitative expertise to drive data governed decision-making.

KEY COMPETENCIES

- **Certifications:** IBM Certified Data Science Professional, Infosys Certified Python and MySQL Associate, Microsoft Azure AZ-900, IELTS (Overall 8.0), New Relic Full Stack Programmability, Business Communication Excellence Program, Data Modelling in Snowflake, Microsoft Azure Data Engineer Associate DP-203 (in Progress)
- **Technologies:** Python (NumPy, Pandas, Scikit-Learn, PySpark), R, Java, SQL, DBMS, Oracle, DB2, Tableau, PowerBI, Excel, Git, Perl, Snowflake, Alteryx, HTML/CSS/JS, Django, Angular, SpringBoot, JIRA
- **Data Skills:** Data Cleaning, Predictive modelling, Quantitative Forecasting, Descriptive analysis, Data Visualization, Machine Learning, Agile practices, ETL Processes, Data Management, Optimisation, Scripting, Software Testing, Web Development, Linux Commands, Dashboards & Reporting
- **Soft skills:** Communication, Leadership, Team Management, Analytical Thinking, Problem-Solving, Attention to Detail, Adaptability, Mentoring, Learning Agility, Resilience, Proactive, Teamwork, Interpersonal skills

PROFESSIONAL EXPERIENCE

GILLMORE CENTRE FOR FINANCIAL TECHNOLOGY   Coventry, UK
FinTech Technician   JUN 2023 – Present

The Gillmore Centre for Financial Technology at the University of Warwick focuses on rigorous research and innovation, aiming to drive forward the integration of technology in financial services. Here, I work on projects by upskilling on the latest technologies and conduct training sessions for lab users, thereby bridging the gap between innovation and implementation.

- **Implemented Web-Scraping using Python-based tools** for data collection, processing, and validation of 600+ FinTech journals and academic papers, significantly contributing to the development of Gillmore-GPT
- **Conducted Python Workshops for Masters students** at WBS, fostering technical proficiency and industry-relevant skills to participants from non-technical backgrounds, enhancing their analytical competencies
- **Collaborated with various departments** at the University of Warwick to successfully establish partnerships and lead the planning of major events, including the Gillmore Hackathon
- **Partnered on deploying Crypto Dashboard** analytics platform to university servers, aggregating data from credible sources using APIs and delivering essential insights to stakeholders

INFOSYS LTD   Thiruvananthapuram, India
Systems Engineer (Analytics)   NOV 2020 – AUG 2022

Infosys is a global leader in IT services and consulting, and it harnesses AI-powered core capabilities in an Agile Digital, Enterprise Cloud Ecosystem. At Infosys, I leveraged my analytical and problem-solving skills to create software-related solutions for clients across the world.

- **Automated analysis systems using Python, Java, and Perl**, to reduce human intervention by 75% and implemented robust error-handling features to enhance system reliability and operational efficiency
- **Optimised SQL query performance** in complex databases (>1 TB) through the effective use of joins, window functions, procedures, and triggers to decrease execution time by 33%, indicating proficiency in large-scale data management
- **Showcased impactful leadership by mentoring** new IT recruits to develop production-ready code by coaching them on efficient coding practices, leading to a 40% increase in team morale in the subsequent review cycle
- **Implemented a Full-Stack project** in the Telecom domain utilising Angular for the Front-end and SpringBoot for the Back-end, working on the entire life-cycle from requirement-gathering to deploying
- **Utilized interactive dashboards** of a real-time Kafka-based data platform to execute operations like filtering, transforming, windowing, and aggregation on incoming data streams, while identifying & resolving data inconsistencies with the server
- **Demonstrated adaptability and learning agility** by completing various training programs and certifications to meet evolving business needs, achieving an average score of 89%

THE SPARKS FOUNDATION   **Singapore (Remote)**
Data Science Intern   **OCT 2020 – NOV 2020**

The Sparks Foundation is a non-profit organization dedicated to fostering a collaborative environment that encourages innovation, continuous improvement, and learning.

- **Conducted in-depth analysis** and research on 5+ real-world datasets using Python, extracting actionable insights, and contributing to impactful decision-making processes
- **Collaborated with a global team** of community members and mentors to perform exploratory data analysis, significantly enhancing data understanding and information extraction
- **Designed and implemented interactive dashboards** using Tableau and PowerBI, facilitating visual representation of data insights thereby boosting stakeholder engagement

EDUCATION

WARWICK BUSINESS SCHOOL   **SEP 2022 – SEP 2023**
Master of Science in Business Analytics
<u>Modules:</u> Analytics in Practice, Data Management, Pricing Analytics, Advanced Analytics: Models & Applications, Optimisation models, Advanced Data Analysis, Financial Analytics, Business in Practice, Statistics

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY   **AUG 2016 – MAY 2020**
Bachelor of Technology in Computer Science & Engineering
<u>Relevant coursework:</u> Data Structures, Algorithm Analysis, Software Engineering & Project Management, Computer Architecture, Database Design, Operating Systems, Calculus, Probability, Object-Oriented Design, System Software, Data Mining & Warehousing, Graph Theory, Cryptography, Optimization, Data Science

RELEVANT PROJECTS

STATISTICAL ANALYSIS & FORECASTING:

Applied ARIMA and machine learning algorithms using Python and PowerBI to develop accurate energy demand forecasts, analysing trends and seasonality across a large dataset of 100000+ rows.

DATA TRANSFORMATION & CUSTOMER SEGMENTATION:

Leveraged dimensionality reduction techniques like PCA and Factor Analysis in R to handle multicollinearity and produce uncorrelated feature sets from complex customer datasets. Utilized K-Means clustering to segment customers into 4 clusters and predicted bad loans based on variables like Credit Score, Loan purpose, Annual income, DTI, Employment status, etc.

FINANCIAL ANALYTICS:

Developed a portfolio optimization solution using the Mean-Variance Markowitz model to construct efficient frontiers and determine optimal asset allocation in Python. Compared and forecasted efficient frontiers for three risk-return scenarios (conservative, moderate, aggressive).

DATABASE MANAGEMENT:

Designed an SQL database for efficient storage and retrieval of energy consumption data, facilitating rapid and reliable access to historical and forecasted information, supporting real-time decision-making.

FAULT DIAGNOSIS USING MACHINE LEARNING:

Implemented Linear and Polynomial Regression models to analyse phase currents in a BLDC Motor and applied Machine Learning algorithms like Random Forest, Logistic Regression, SVC, and k-NN to classify normal and fault conditions.

ADDITIONAL EXPERIENCE

- **TRADER,** *(SELF-EMPLOYED)*   **JUL 2020 – MAY 2022**
  Coordinated with a team of stock market enthusiasts in analyzing market trends and predicting the National Stock Exchange's recovery post-pandemic. Achieved an exceptional 110% growth in capital through strategic investments and risk management.

- **ENTREPRENEUR,** *(CLENSTER)*   **JUN 2020 – OCT 2020**
  Co-founded an Instagram-based business offering on-premises car wash services, providing part-time employment to over 10 college students. Successfully managed marketing, operations, and customer service, resulting in steady business growth and enhanced service reach.

- **FUNDRAISER,** *(RAJAGIRI SCHOOL OF ENGINEERING & TECHNOLOGY)*   **FEB 2019 – MAR 2019**
  Restructured and enhanced the sponsorship team for the college Tech-fest, securing investments of more than 60000 INR for the event by engaging top-tier business professionals. Conducted strategic meetings resulting in increased funding and successful event execution.