Shrruti Madhusudhan

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SUMMARY

Data-driven problem-solver passionate about turning complex datasets into clear insights and operational improvements. Proven experience in automating processes, using analytics for storytelling, and collaborating across functions to support data-informed decision-making within a major financial institution. Seeking to apply skills and financial acumen to solve impactful business challenges.

WORK EXPERIENCE

JPMorganChase and Co.   **Apr 2025 – Present**
Firmwide Technology Resiliency Intern   *Singapore*

- Scaled a firmwide **'Resiliency-as-a-Service'** engine by leveraging **advanced prompt logic and structured LLM constraints** to automate manual **APAC simulation exercises** into a self-service, on-demand platform; enabled stakeholders to execute autonomous, **high-fidelity test events** that provide real-time risk assessments and actionable resilience metrics.
- Translated analysis of **4,000+ application datasets** into executive insights, delivering trend & gap reports and interactive Tableau dashboards that highlighted anomalies and directly informed senior leadership's strategic decisions.
- Implemented a **robust Data Integrity & Governance framework** to validate high-stakes datasets, **increasing reporting accuracy** to ensure compliance for internal audit readiness.

EDUCATION

Nanyang Polytechnic (NYP)   **Apr 2023 - Apr 2026**
Diploma in Business and Financial Technology, School of Information Technology

- **CGPA: 3.76/4.0**
- **Relevant Coursework (All with Distinction):** Business Application Development, Business Analytics, Financial Management, Business Statistics, Cloud Computing, Software Engineering
- **Leadership**
  - **President** of the institution's Ambassadorial Team
    - Led a 10-member team to execute outreach strategies for **200+ prospects**, directly contributing to a **10% growth rate** increase for the organization.
  - **Vice President** of the NYP Google Developer Student Club
    - **Organized and led technical workshops** on Data Analytics & AI for 100+ members, fostering practical skills development within the student community.
- **Awards & Honours**
  - Dean's List (Top 15% of cohort; awarded 3×)
  - MOE Edusave Skills Award (ESA)
  - MOE Edusave Academic Achievement Award (2×)
  - GovTech GeekOut 24-hr Hackathon (Champion)
  - United Women Singapore (UWS) Fintech Capstone Project (Champion)
  - Lee Hsien Loong Smart Nation Awards Hackathon (Semi-Finalist)
- **Programmes**
  - Harvard Business School Mentorship Programme
  - Microsoft Code Without Barriers 2025 Cohort
  - Pro-Bono Project Work with non-profits cordy.sg and Narpani Indian Activity Executive Committee (IAEC)

FEATURED PROJECTS

ReThread Ecommerce Thrift Shopping Site, Outstanding Presentation Accolade (NYP)
Tech Stack and Tools: C#, SQL, Machine Learning (ML).NET Package
- Developed an **end-to-end ETL pipeline** to ingest, cleanse, and structure raw customer feedback data, enabling the training of a **machine learning sentiment classification model** that identified key drivers of customer satisfaction.
- Performed **exploratory data analysis (EDA) on user behavior datasets**, uncovering patterns that informed the logic for an AI-powered recommendation system (via external API), personalizing suggestions to **simulate increased sales conversion.**
- Engineered an automated feedback response tool leveraging AI to **generate context-aware** email replies, **streamlining administrative workflow** and demonstrating the **application of automation** for operational efficiency.

Evaluating Singapore's Waste Management Scene, Interactive Dashboard (NYP)
Tools: Tableau, Excel, Data Analytics
- Led **end-to-end data analysis** of national waste datasets, performing extraction, cleansing (using Excel & Tableau Prep), and visualization to **identify critical trends** in recycling and landfill reliance.
- **Designed and deployed an interactive Tableau dashboard** that translated complex environmental data into clear, actionable insights, facilitating evidence-based policy discussions.
- Formulated **data-driven recommendations** to improve recycling adoption, demonstrating the ability to turn analytical findings into strategic operational proposals for sustainable urban planning.

Amazon Web Services (AWS) Cloud Architecture Project (NYP)
Tools: Amazon Web Services (AWS), Cloud Economics, TCO Modelling
- Orchestrated a scalable Cloud Infrastructure for an SME using AWS (VPC, S3, RDS), **prioritizing high availability and multi-layer network security** to support business-critical operations and data redundancy.
- Designed a robust **Data Management layer** by integrating Amazon RDS and S3, streamlining database performance and ensuring **99.9% data durability for downstream analytical reporting**.
- Executed a comprehensive Cloud Economics analysis using AWS Pricing Calculator to forecast Total Cost of Ownership (TCO), identifying a 15% optimization in projected spend through strategic resource right-sizing.

SKILLS

Programming: Python (Pandas, NumPy), Flask, Jinja, C#, JavaScript, SQL

Data Visualization & BI: Tableau, Tableau Prep, Power BI, Excel

Cloud Platforms: Amazon Web Services (AWS), Google Cloud Platform (GCP)

Data Science Tools: Orange Data Mining

Web Development: HTML, CSS, Figma

Certifications & Badges

- Amazon Web Services (AWS) Machine Learning Foundations Badge
- Amazon Web Services (AWS) Cloud 101 Badge
- Amazon Web Services (AWS) Bedrock Fundamentals
- AI Certification (AI4I Literacy)
- Google Generative AI Course – Encoder decoder Architecture
- Google Generative AI Course – Transformer models and BERT models