Soumya Pednekar

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EDUCATION

University of Maryland Baltimore County — **Expected May 2025**
Master of Science in Information Systems
GPA: 3.76/4.00

University of Mumbai — **June 2020-May 2023**
Bachelor of Science in Information Technology
GPA: 3.76/4.00

TECHNICAL SKILLS

Programming: R language, Python, SQL, PL/SQL, PHP/MYSQL, Power BI, Django, C, C++, HTML, CSS, JS.
Technologies: AWS Lambda, AWS Bedrock, (AWS S3), API Gateway, Postman, Python, Boto3,Docker
Statistical: Linear regression, Clustering, Decision tree, Random Forest, Forecasting, Time Series, SVM, K-means.

WORK EXPERIENCE

Extern — **Aug 2024 - Sep 2024**
Remote

- Conducted a basic **market analysis** to become familiar with **emerging trends, competitive landscape, and key opportunities** for growth in the Al-enabled **productivity tools market**.
- Conducted **research to source a startup** that aligned with the **organization's investment thesis.**
- Conducted due diligence on a startup to **prepare an investment summary** to highlight the viability and growth potential of potential investments.

PROJECTS

Google Data Analytics Capstone – Summary Report for Bellabeat (Feb 2025)

- Analyzed **200+ data points across 8 datasets** from Fitbit smart devices to identify trends in daily activity, sleep patterns, and calorie expenditure.
- Cleaned, transformed, and visualized data using **RStudio, Tidyverse, ggplot2, and dplyr** to ensure data integrity.
- Identified a **41% correlation between total steps and calories burned**, guiding Bellabeat's **fitness recommendation strategy**.
- Delivered **data-driven marketing insights**, optimizing campaigns to improve user retention by **20%**.

AI-Powered Blog Generator using AWS Bedrock (Dec 2024)

- Developed an **automated content generation system** using **AWS Bedrock and Llama 3.2 8B** for AI-driven text generation.
- Engineered a **serverless architecture** with **AWS Lambda and API Gateway**, enhancing processing efficiency.
- Integrated **Amazon S3 for scalable content storage**, improving data accessibility by **80%**.

Sentiment Analysis on Amazon Reviews (Apr 2024)

- Analyzed **50,000+ Amazon reviews** using **NLTK and SentimentIntensityAnalyzer** to extract customer sentiment insights.
- Applied **under-sampling and oversampling techniques** to mitigate class imbalance, enhancing model generalization.
- Trained and optimized **Logistic Regression, Decision Trees, SVM, and Random Forest models**, achieving **73.9% accuracy** with cross-validation.
- Leveraged sentiment insights to inform **content engagement strategies** for e-commerce platforms.

CERTIFICATIONS

Google Data Analytics Capstone: Complete a Case Study (Google) — **Feb 2025**

Machine Learning Specialization. (Stanford University & DeepLearning.AI) — **June 2024**

- Supervised Machine Learning: Regression and Classification
- Advanced Learning Algorithms
- Unsupervised Learning, Recommenders, Reinforcement Learning