

Yamini Manral

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SUMMARY

Data professional with **4+ years** of experience in **data science, advanced analytics, and cloud technologies**. Self-driven problem-solver with a passion for learning and committed to delivering solutions. Seeking opportunities in dynamic, innovation-driven environments where data insights drive decision-making and growth.

EXPERIENCE

Data Science Intern

Jan 2025 – Present

Humanitarians.AI - Stellis Labs

Boston, MA

- Designing and implementing a modular counterfactual reasoning agent, enabling comprehensive “what-if” scenario analysis with logical and probabilistic reasoning capabilities to derive actionable insights for complex business scenarios.
- Enhancing hypothesis evaluation by incorporating data analysis and probabilistic modeling techniques.

Data Science Intern

Aug 2024 – Dec 2024

Abecedarian LLC

Boston, MA

- Analyzed customer purchasing patterns and behavioral data using Python and SQL, developing segmentation models that increased customer retention by 25% through personalized marketing strategies.
- Developed and deployed machine learning models using scikit-learn and TensorFlow for customer behaviour analysis, achieving 92% accuracy in churn prediction and reducing customer attrition by 25%.
- Created collaborative filtering and content-based recommendation models using scikit-learn, analyzing 1M+ customer-product interactions to improve product discovery by 40% and average cart value by 30%.

Data Analyst Intern

May 2023 – Dec 2023

Dinosys Infotech

Boston, MA

- Led data exploration and anomaly detection on huge datasets, leveraging Python, SQL, and modern ML techniques.
- Built and maintained 15 real-time Tableau dashboards for SOC analysts, implementing custom KPIs and alert thresholds that reduced average incident response time by 40% through improved visualization of security metrics.
- Implemented automated reporting pipelines for security incidents using Python and Tableau, providing actionable insights to stakeholders and reducing manual analysis time by 60% while improving data accuracy.

SAP ABAP Developer

Jul 2019 – Aug 2022

Accenture Solutions Pvt Ltd

Bengaluru, India

- Configured new tenant databases and performed database administration using SAP HANA cockpit, while conducting SQL Trace performance tuning to identify bottlenecks, reducing query time by 40% and enhancing overall database performance.
- Delivered interactive SAP Fiori applications, enabling real-time insights & product performance monitoring for insight-driven decisions to 50+ stakeholders and subsequently improving customer experience for more than 1000 users.
- Developed and optimized 50,000+ lines of SAP ABAP code to debug and enhance cloud applications, boosting performance by 35% and ensuring system stability across multiple SAP environments.

PROJECTS

Text Summarization and Summary Detoxification - *Huggingface, transformers, trl, NLP*

[Link]

- Performed fine-tuning and hyperparameter tuning on Google’s Flan-T5 base model for the SAMSUM dataset, incorporating training, regularization, and evaluation techniques to optimize summarization accuracy.
- Leveraged transformers and LangChain for text summarization, employing prompt engineering techniques to fine-tune responses using GPT-based large language models which enhanced model outputs by 90% with ROUGE-based metrics.

PDFBot - *Python, Chroma, LangChain, OpenAI*

[Link]

- Engineered a pipeline for document analysis and question-answering using LangChain and Google’s Flan-T5 base, automating extraction of specific information from PDF documents.
- Leveraged Chroma vector databases, custom token splitting to optimize document indexing & retrieval, boosting efficiency.

SKILLS

Programming Languages: Python, SQL, R, C++, JavaScript, HTML, CSS, Powershell, Bash

Data Science and Analytics: NLP, ML, Tableau, PowerBI, Looker, Alteryx, SAS, MATLAB, AWS SageMaker

Database and Cloud: MongoDB, MySQL, SQL Server, SAP Cloud, GCP, Azure, AWS, Excel

EDUCATION

Master of Science, Computer Software Engineering

Sep 2022 – May 2024

Northeastern University, Boston, MA

GPA: 3.7/4

Bachelor of Technology, Computer Science

Sep 2015 – May 2019

SNDT University, Mumbai, India

GPA: 3.5/4

- Published paper: *Augmented Reality-Based Visual Dictionary for Elementary Students*, Springer ICSCN, 2019

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