Yamini Manral

Smith St, Boston, MA 02120 − (332) 209-7580 − manral.y@northeastern.edu − LinkedIn − GitHub

SUMMARY

Data professional with **6 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 Scientist — 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.
- 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.
- Migrated on-premises applications to SAP Cloud successfully, ensuring a 95% reduction in downtime and seamless transition.

PROJECTS

BlueBikes Station Analytics Dashboard 2024 - *Excel, CSV, Tableau*

- Extracted interactive insights from 4M+ trip records, highlighting key performance indicators and station performance, route details, and peak demand periods per station, optimizing station availability and resource allocation.

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

- Performed fine-tuning and hyperparameter tuning on Google's Flan-T5 base model for SAMSUM dataset, including training, regularization, and evaluation techniques to optimize summarization accuracy; employing prompt engineering techniques to fine-tune responses.

PDFBot - *Python, Chroma, LangChain, OpenAI*

- Engineered pipeline for document analysis and Q&A using LangChain and Google's Flan-T5 base model, automating information extraction from PDFs, 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: MySQL, SQL Server, MongoDB, SAP Cloud, GCP, Azure, AWS, Excel
Libraries: pytorch, tensorflow, seaborn, nltk, beautifulsoup, spacy, keras
Software and Tools: TensorFlow, Pytorch, Git, Jira, Salesforces, Confluence, Agile, Scrum, Lean, CI/CD

EDUCATION

Master of Science, Information Systems — 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