

ARYA AMARNATH

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• Fort Collins, CO - Open to Relocation

Education

Colorado State University	Fort Collins, CO
Bachelor of Science in Data Science with Economics Concentration + Statistics Minor	08/2020 - 05/2024
<ul style="list-style-type: none">4th Paradigm, Economics Student Leadership Club, National Society of Black EngineersRelevant Coursework: Time Series Analysis, Multivariate Statistics, Optimization Methods, Econometrics, Data Wrangling + Data StructuresCapstone Project: Developed prediction-based LSTM using historical conflict data for Israel-Palestine conflict, which identified key indicators at an 85% Accuracy	

Experience

Realyx LLC	Colorado
Real Estate Manager / Portfolio Analyst	08/2021 - Present
<ul style="list-style-type: none">Increased portfolio cash flow by 30% over three years by leveraging rental analytics to identify cost-saving opportunities and improve revenue across assetsStreamlined operations across properties with Stessa and automated monthly analytical reports providing actionable insights for future planning and successConducted detailed expense tracking and analysis to reduce overhead costs by 24%, driving profitability and improving tenant satisfaction rates	
Angi	Denver, CO
Data Science Intern	06/2023 - 08/2023
<ul style="list-style-type: none">Developed and deployed a predictive NLP text classification model using AWS SageMaker, improving customer marketing by identifying patterns with 65% accuracyEngineered an XGBoost classification model utilizing TF-IDF, BERT embeddings, and robust imputation strategies, enhancing model accuracy by 25% over baselineAnalyzed 1M+ customer interaction records: Designed a scalable query pipeline using SQL and Snowflake to enhance customer-to-sales rep interactionsShadowed Applied Data Science Team: Hands-on with SEO/M, customer-matching algorithms, and data-driven solutions for contractor and homeowner experience	
interviewIA	Denver, CO
Data Analyst Intern	06/2021 - 01/2022
<ul style="list-style-type: none">Created Tableau and Apache Superset dashboards that visualized KPI's for over 1,000 users across 30 companies, enabling stakeholders to make informed decisionsAutomated KPI Reporting: Streamlined the creation of weekly and monthly KPI reports, reducing manual reporting time by 30%Utilized Pendo and other BI tools to wrangle + analyze user interaction data, leading to a 10% improvement in engagement metrics over four monthsLearned and applied the basics of AWS EC2, Docker, and Jenkins, gaining experience with scalable server setups and supporting continuous integration processes	
DataNow Solutions	Hosur, Tamil Nadu
Full-Stack / DevOps Trainee	01/2019 - 03/2019
<ul style="list-style-type: none">Developed and optimized an open-source data portal: Angular, NodeJS, and Elasticsearch, enabling families in Riyadh to calculate tuition fees with 100% accuracyWorked with engineers and the DevOps team to implement object-oriented programming principles and inheritance, improving the scalability of the system by 20%Helped create streamlined preprocessing pipelines, allowing for real-time analytics on oil production across wells in the US, improving reporting accuracy by 15%	

Skills

ML + Deep Learning: scikit-learn (Regression + Classification) • TensorFlow • Pytorch (RNN & CNN) • Keras • XG Boost
Programming: Python • R • SQL • Angular + NodeJS
Analysis + Visualization: Pandas • NumPy • Matplotlib • Seaborn • Plotly • PowerBI • Tableau
Big Data: Hadoop (Spark & HDFS) • AWS (EC2 & S3) • Google Cloud
Statistical Techniques: Casual/Bayesian Inference • Regression Analysis • Time-Series Forecasting • Multivariate Analysis • Hypothesis Testing • A/B Testing
Certifications: Practical Data Science on the AWS Cloud • IBM Machine Learning Professional - IP • Generative AI with AWS - IP

Notable Projects

Pantry+ : A Digital Pantry Companion (Mobile Application - In Progress)	2024 - Present
<ul style="list-style-type: none">Designed and developing an app using Flutter/Dart to track grocery expiry dates, recommend recipes, and send notifications, reducing food wastage for students and families by an estimated 20%Integrated advanced image recognition technology powered by Google Gemini 1.5, enabling barcode and receipt scanning with a (current) 75% success rate for identifying grocery items and capturing product details including calories + expiration dates	
Predicting Breast Cancer Type via Classification Models	2024
<ul style="list-style-type: none">Developed ML models (General Linear Models, Random Forest, K-Nearest Neighbors, and Support Vector Machine) to predict benign or malignant cancer cells with an overall accuracy of 96.7% using a real-world dataset from Kaggle. Utilized L1/L2 Regularization, Principal Component Analysis and Cross Validation	
Discord Chatbot – Sentiment-Aware, Contextual Assistant	2024
<p>Designed and built a sentiment-aware chatbot using Python and NLTK, trained on over 100,000+ Discord messages to emulate user tone, voice, and conversational cadence with 85% sentiment classification accuracy</p> <ul style="list-style-type: none">Implemented Natural Language Understanding (NLU) features, including entity extraction and intent recognition, to provide contextually relevant responses and simulate dynamic conversationDeveloped a personality emulation module, enabling the chatbot to mimic specific user behavior patterns through TF-IDF vectorization and conversational modeling	