Aishwarya Bhanage

Education

Stony Brook University

Masters of Science in Data Science

Sinhgad Institute of Technology and Science

Bachelor of Engineering in Computer Engineering

Professional Experience

Veach & Company

Founding AI/ML Engineer Intern

New York City, NY Jul 2025- Present

May 2016- May 2020

Stony Brook, NY

Pune, MH

Aug 2024- Present

• Designing an Al-driven investor matching engine using GPT-4, Supabase, FastAPI, and React, producing top-K ranked investor recommendations based on semantic similarity of pitch deck, resulting in increasing match relevance scores by 40%.

• Skills: LangChain, LlamaIndex, Pinecone, OpenAI, Transformers (HuggingFace), FAISS, n8n

Accenture Solutions Pvt Ltd

Packaged App Development Analyst

Pune, MH Jun 2022 - Oct 2023

- Engineered predictive anomaly detection models using **XGBoost and logistic regression** in Python to detect fraudulent behavior in banking transactions, with a **95% accuracy rate**, monitoring **1M**+ daily records and decreasing false positives by **40%**.
- Optimized **ETL** data pipelines using PySpark and Databricks SQL to process banking transaction data, increasing process time by 20% and allowing for real-time analytics on 1M+ daily transactions.
- Incorporated statistical analysis and Python libraries (Pandas, NumPy) to analyze user behavior patterns on Android/iOS to identify usability bottlenecks for performance that resulted in a 25% increase in user journey completion.
- Led a cross functional analytics team of 4 engineers to rectify issues with data processing bottlenecks using **Agile methodologies** that delivered 25% additional work features per sprint and decreased project delays by 20%.
- Created interactive **machine learning** dashboards in **Tableau and Power BI** to allow executive-level stakeholders to visualize model performance metrics and KPIs, which minimized reporting time by 30% and allowed data driven decision making.
- **Skills**: Python, XGBoost, Logistic Regression, PySpark, MySQL, Tableau, Power BI, Pandas, NumPy, Anomaly Detection, Data Pipelines

Accenture Solutions Pvt Ltd

Pune, MH Dec 2020 - May 2022

Associate Software Engineer

- Constructed A/B testing framework for product launches using Python and SQL, this action accelerated testing cycles, which
 led to 8 new features being launched.
- Built a hash-based lookup algorithm in Python to enhance data retrieval from banking databases which also cut query response time to 35% improving real-time service for customers.
- Formed **data preprocessing** workflows in Python and **Excel VBA** using automated information cleaning for 50% reduction in processing time which positively affected data accuracy for additional analytics.
- Skills: Python, SQL, Apache Spark, Agile, Excel VBA, Data Engineering, Team Leadership

Leadership Experience

Stony Brook University

Graduate Student Organization Treasurer

Stony Brook, NY May 2025 - Present

- Managed transparent financial operations for **8,000+ graduate students**, compliantly managing five reimbursement lines and led effective budget meetings resulting in a 98% budget approval to provide financial security.
- Skills: Leadership, Financial Budgeting, Communication, Stakeholder Management, Reporting, Blackbaud

Projects

Mythology-Based Story Generator & Narrator

- Implemented a retrieval-augmented generation system which used Falcon-7B and E5-base embeddings (**PyTorch**) to ingest over 5M tokens while achieving 93% accuracy and less than 3% hallucination across 20+ test conditions.
- Skills: RAG, Falcon-7B, PyTorch, NLTK, Transformers, NLP, LLMs

Avocado Market Analysis- US price & Sales Trends

- Examined 18K+ records of avocado sales in 50+ regions of the US to expose seasonal price shifts, regional discrepancies, and volume oscillations and created visualizations and dashboards focusing on organic price premiums, elasticity of demand, and market conditions for business recommendations driven by data.
- Skills: Python (Pandas, NumPy, Seaborn, Matplotlib), SQL, Data Visualization, EDA, Statistical Analysis

Skills

Programming Languages: Python, R, SQL(MySQL, Databricks SQL, SQLite), Javascript, HTML/CSS, C++, OOPS

Frameworks & Libraries: PySpark, FastAPI, Docker, Git, Scikit-Learn, PyTorch, Pandas, NumPy, NLTK, Seaborn, Keras **Platforms:** Snowflake, Oracle, MongoDB, Azure Data Factory, AWS (S3, SageMaker), Teradata, n8n

Specializations: Predictive Modeling, Anomaly Detection, NLP, Statistical Analysis, Feature Engineering

Visulaizations & Tools: Tableau (Certified Tableau Desktop Specialist), Power BI, Matplotlib, ServiceNow, Confluence, JIRA