JAYA KHAN

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EDUCATION

DUKE UNIVERSITY   **Durham, NC**
Master of Science, Major in Interdisciplinary Data Science   **2021-2023**
- **Graduate Teaching Assistant:** Fraud Analytics (Spring 2023), Natural Language Processing (Fall 2022).
- **Relevant Coursework:** Principles of Machine Learning, C++ Data Structures and Algorithms, Data Engineering Systems, Statistical Modelling, Causal Inference – A/B testing, Data Analysis in Cloud, Data Visualization, Ethics in Data Science.

DR APJ KALAM TECHNICAL UNIVERSITY   **Lucknow, India**
Bachelor of Technology, Major in Electronics and Communication Engineering   **2007-2011**

EXPERTISE

Coding: C++, Java, Python, Rust, R, JavaScript, SQL.
Data Science: Predictive Modelling, Machine Learning, Anomaly Detection, Random Forest, Neural Network, Cohort Analysis, Clustering, Topic Modelling, Bayesian missing data imputation, Data Wrangling, Data Storytelling.
Others: Docker, Jenkins, Kubernetes, GCP, Maven, Kafka, Hadoop, Git, Jira, JUnit, Jupyter, IntelliJ IDEA, Tableau, Postgres, PowerPoint, Altair, Plotly, NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn, TensorFlow, Keras, NLTK, PyTorch.

WORK EXPERIENCE

AMERIPRISE FINANCIAL, *Data Science Intern*   **Minneapolis, MN (May'22-Aug'22)**
- Doubled cash transactions for annuities and insurance products by leveraging user behaviour and a Gaussian mixture model to segment underperforming wholesalers. Honed sales strategies with insights from behavioural segmentation.
- Devised KPIs for wholesalers' success by aligning with company leadership and stakeholders, incorporating financial metrics such as advisor contacts and relationship breadth to measure sales.
- Automated AWS SageMaker data processing with DAGs for real-time dashboard on model results for stakeholders.

ADOBE, *Digital Strategy Analyst*   **Bengaluru, India (2017-2021)**
- Assisted Adobe in securing $1.1 MM deal by improving customer experience for a financial client via cross-functional team interviews, resolving data-silos (via ETL pipeline and API endpoints), and executing customer journeys.
- Generated a 20% increase in new customers for a retail giant by analysing Facebook pixel data and reallocating resources to optimal channels (Direct Email, Facebook Ads). Achieved through attribution analysis insights.
- Facilitated a $4.1 MM contract with a banking and insurance client by developing a proof of concept for seamless CX, integrating cloud and CRM IDs and building real-time customer profiles in Adobe Experience Platform (CDP).

DELOITTE, *Technology Consultant*   **Bengaluru, India (2015-2017)**
- Improved click-through rate by 35% for a Fortune 500 pharmaceutical client by using a cosine similarity measure to tailor the web application's promotional content.
- Increased online sales by 23% with just-in-time promotions for a retail giant by deploying ETL Kafka's pub/sub messaging pipeline to trigger notifications on shopping cart abandonments.
- Accelerated development time by 25% for a top bank client by automating web analytics tracking through designing data layer, webpage template categorization, and script integration.

WIPRO, *Java Developer*   **Bengaluru, India (2012-2015)**
- Achieved $170K in yearly efficiency gains for multi-level marketing client by deploying SAML single sign-on user-authentication module that eliminated the need for multiple logins.
- Augmented 38% improvement in the message delivery speed and accuracy for a financial services client by leveraging Java-based XML processing APIs (JAXB and JMS).
- Reduced website downtime by ~60% for a financial client by creating a logging monitoring module using Java APIs.

NOTABLE ACADEMIC PROJECTS

CAUSAL INFERENCE: Developed A/B test framework for Airbnb super host label using DAME-FLAME to create treatment and control groups. Regression Result: $3,127 higher revenue.
VOICE CHATBOT: Built scalable chatbot using Flask, SpeechRecognizer, and OpenAI APIs. Deployed on Azure Kubernetes Service and load tested with Locust for immersive user experience.
LOAN DEFAULT RISK MINIMIZATION: Mitigated fraud risk with logistic regression, evaluating creditworthiness with multiple factors (credit score, work history, income) and detecting red flags in loan applications.

ADDITIONAL INFORMATION

Volunteer: Spearheaded automation initiatives at Adobe, collaborating with process owners to identify and streamline repetitive tasks using Excel macros, achieving a time savings of 4.5 hours per week.
Recognition: Recognized for outstanding performance and promoted to Consultant from Analyst at Deloitte.
Interests: Running | Writing | Researching emerging technologies | Listening to podcasts