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 in Tableau.

DR APJ KALAM TECHNICAL UNIVERSITY   **Lucknow, India**
Bachelor of Technology, Major in Electronics and Communication Engineering   **2007-2011**
- Graduated with First Division and ranked in the top 10% of the class

TECHNICAL SKILLS

- **Cloud Services:** Adobe Experience Cloud, Amazon Web Services, Google Cloud Platform.
- **Programming Language:** C++, Java, Python, Rust, R, JavaScript, SQL, Excel VBA.
- **Development Environment:** Visual Studio, EMACS, Eclipse, IntelliJ IDEA, Jupyter Notebook.
- **Data Analysis:** Random Forest, Cohort Analysis, Clustering, Regression, Missing Data Imputation, Neural Network.
- **Data Visualization:** Tableau, Microsoft Excel, Plotly, Altair, PowerPoint.
- **DevOps and CI/CD:** Docker, Jenkins, Kubernetes, Apache Maven, Jira, Git, OSGI, JUnit, Apache Kafka.
- **Data Storage:** DMP, CDP, Java Content Repository, MySQL, AWS, Postgres, Oracle, Apache Hadoop, Databricks.

EXPERIENCE

AMERIPRISE FINANCIAL, *Data Science Intern*   **Minneapolis, MN (May'22-Aug'22)**
- Drove 2x increment in sales from underperforming wholesalers by developing Gaussian mixture model to segment profitable wholesalers and sharing best practices with target wholesalers.
- Devised KPIs for wholesalers' success by aligning with company leadership and stakeholders, measuring advisor contacts and relationship breadth.

ADOBE, *Digital Strategy Analyst*   **Bengaluru, India (2017-2021)**
- Contributed to $4.1 MM contract with a retail giant through a proof of concept on dynamic email solution, leveraging real-time customer data from a centralised hub (CDP) for a comprehensive view of customer journeys.
- Assisted Adobe in securing $1.1 MM deal with a manufacturing client by resolving data-silos in enterprise architecture via data pipeline creation, data deep-dives, and cross-functional team interviews.
- Elevated client engagement score with Adobe Analytics by 7% (exceeding 5% goal) by prioritizing mobile app performance metrics through A/B tests and benchmarking metrics against industry average.

DELOITTE DIGITAL, *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 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 LIMITED, *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 an oil & gas client by creating a logging monitoring module using Java APIs.

NOTABLE ACADEMIC PROJECTS

- **CAUSAL INFERENCE:** Created A/B test framework for super host label of Airbnb, using DAME-FLAME library to create treatment and control groups. Regression analysis revealed $3,127 higher revenue for super hosts, facilitating industry adoption for the impact analysis framework.
- **VOICE CHATBOT:** Developed a scalable voice chatbot using Flask, SpeechRecognizer, and OpenAI APIs. Built with AWS EKS for high availability and load tested with Locust. Capable of responding to user input in natural language for an immersive chat experience.

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.
- **Leadership:** Honourable mention in Hackmakers Hackathon 2021 for interactive UI concept that democratizes research content access to achieve UN's Quality Education Goal (#4.4).
- **Recognition:** Recognized for outstanding performance and promoted to Consultant from Associate at Deloitte.
- **Interests:** Running | Writing | Researching emerging technologies | Listening to podcasts