

# JAYA KHAN

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## EDUCATION

### DUKE UNIVERSITY

*Master of Science, Major in Interdisciplinary Data Science*

Durham, NC

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 AI.

### DR APJ KALAM TECHNICAL UNIVERSITY

*Bachelor of Technology, Major in Electronics and Communication Engineering*

Lucknow, India

2007-2011

## TECHNICAL SKILLS

- **Cloud Services:** Adobe Experience Cloud, Amazon Web Services, Google Cloud Platform.
- **Programming Language:** C++, Java, Python, Rust, R, JavaScript, PL/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, Plotly, Altair, Microsoft Excel, PowerPoint.
- **DevOps and CI/CD:** Docker, Jenkins, Kubernetes, Apache Maven, Jira, Git, OSGI, JUnit, Apache Kafka.
- **Data Storage:** DMP, CDP, JCR, MySQL, Postgres, Oracle, Apache Hadoop.

## WORK 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 manufacturing 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 an auto 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:** Developed A/B test framework for Airbnb super host label using DAME-FLAME to create treatment and control groups. 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.

## 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