

# JAYA KHAN

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## EDUCATION

### DUKE UNIVERSITY

*Master of Science, Major in Interdisciplinary Data Science*

Durham, NC  
2021-2023

- Teaching Assistant: Fraud Analytics 523Q, Natural Language Processing ECE 684
- Awarded tuition scholarship for outstanding academic and professional accomplishments (ranked in top admits)
- Club: WISE (Women in Science and Engineering)

### DR APJ KALAM TECHNICAL UNIVERSITY

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

Lucknow, India  
2007-2011

- Graduated with First Division and was ranked in the top 20% of the class

## EXPERIENCE

### AMERIPRISE FINANCIAL, *Data Science Intern*

Minneapolis, MN (May'22-Aug'22)

- Developed Gaussian mixture model to segment profitable wholesalers and use their practices to guide low performing wholesalers, anticipating 2x increase in sales contribution of underperforming wholesalers.
- Designed impactful relationship based KPIs using behavioural analysis to optimize sales strategies across territories.

### ADOBE, *Digital Strategy Analyst*

Bengaluru, India (2017-2021)

- Contributed to \$4.1M contract with a retail giant by identifying high-bounce pages during checkout journey, boosting purchase-to-visit conversion rate by 16%.
- Elevated client engagement score by 7% (exceeding 5% goal) by prioritizing mobile app performance metrics in Adobe Analytics.
- Assisted Adobe in securing \$1.1 MM deal with manufacturing client by resolving data-silos in enterprise architecture via data deep-dives and cross-functional team interviews.

### DELOITTE DIGITAL, *Technology Consultant*

Bengaluru, India (2015-2017)

- Used random forest to predict shopping cart abandonments, enabling real-time promotions and increasing online sales by 23% for a retail giant.
- 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.
- Implemented SAML single sign-on user-authentication module for multi-level marketing client, reducing administrative burden by removing need for multiple logins.

### WIPRO LIMITED, *Java Developer*

Bengaluru, India (2012-2015)

- Automated web analytics tracking process for a top banking client, reducing future development time by 25%.
- Improved message delivery speed and accuracy for financial services client by ~38% through designing Java-based XML processing API.
- Reduced website downtime by ~60% for an oil & gas client by creating a logging monitoring module using Java API.

## EXPERTISE

- **Programming Language:** C++, Python, Rust, R, Java, JavaScript, SQL, Excel VBA.
- **Development Environment:** Visual Studio Code, EMACS, Eclipse.
- **Data Analysis:** Random Forest, LSTM, BERT, Stacking, Gaussian Mixture, Missing Data Imputation.
- **Cloud Service:** Adobe Experience Cloud, Google Cloud Platform, Amazon Web Services.
- **CI/CD:** Docker, Jenkins, Git, Microservices, Kubernetes.
- **Data Storage:** Java Content Repository, MySQL, AWS, Postgres, Oracle, Databricks.

## ACADEMIC PROJECTS

- **DUKE HEALTH CLINIC:** Increased vaccine access by 48% for at-risk lupus patients through Bayesian regression analysis on COVID-19 survey data. Achieved highest AUC of 0.703 with MCMC and Gibbs sampler.
- **CAUSAL INFERENCE:** Created scalable impact analysis framework for Airbnb super host label, using DAME-FLAME library to match treatment and control groups. Regression analysis revealed \$3,127 higher revenue for super hosts, facilitating industry adoption.

## ADDITIONAL INFORMATION

- **Adobe Support:** 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.
- **United Nations:** Honourable mention in Hackmakers Hackathon 2021 for interactive UI concept that democratizes research content access to achieve UN's Quality Education Goal (#4.4).
- **Interests:** Running | Writing | Travelling and collecting souvenirs | Exploring ChatGPT capabilities