# Humaiz Akbar

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## Professional Summary

Software Engineer with a strong background in cloud systems and backend development. Experienced in leveraging AWS to design scalable, automated solutions, while integrating effective QA and testing practices to ensure robust system performance. Dedicated to employing modern development methodologies to streamline workflows and enhance operational efficiency.

## Education

**Drexel University**                                      **Anticipated Graduation: June 2025**
Bachelor of Science in Software Engineering                                    Philadelphia, PA
Minor in Data Science

## Work Experience

**FS Investments** – QA Engineer (Co-op & Part-Time)                  **Apr. 2024 – Mar. 2025**
Data Engineering                                                            Philadelphia, PA

- Automated the discovery of AWS resources related to a lambda function by analyzing API calls in CloudTrail (e.g., S3, AppFlow, DynamoDB) and leveraged CloudFormation to deploy any missing resources, consolidated them into cohesive applications.
- Planned and executed the integration of regression tests with AWS Inspector to automate identifying security vulnerabilities and performance issues in AWS Lambda functions, ensuring reliability across environments.
- Utilized the Testim tool from Tricentis to create and automate Salesforce workflows, ensuring functionality and stability across environments post updates.

**Comcast** – Software Developer (Co-op)                              **Mar. 2023 – Sep. 2023**
XLabs                                                                       Philadelphia, PA

- Developed and maintained REST APIs for web and mobile applications, incorporating CI/CD pipelines and unit testing to ensure agile and robust solutions.
- Crafted and optimized SQL queries for efficient data retrieval, supporting the functionality of the developed features.
- Created comprehensive documentation for all features in the web and mobile application, ensuring clear and concise instructions for users.

## Technical Projects

**Automated Capture of Corporate Actions**

- Designed and implemented a serverless workflow using AWS services (S3, Lambda, Textract, SageMaker, DynamoDB) to extract data from unstructured tender offers.
- Fine-tuned an NLP model in SageMaker on domain-specific data to extract structured data fields from financial documents.
- Leveraged AWS EventBridge and Lambda for cost-effective, event-driven document processing.

**Hand Gesture Recognition via Computer Vision**

- Facilitated a team to develop an American Sign Language (ASL) recognition solution using MediaPipe, TensorFlow, and OpenCV.
- Built and trained a custom ASL model from scratch, ensuring accurate translation of hand gestures to text.
- Integrated real-time computer vision techniques to enhance system responsiveness and reliability.

## Technical Proficiencies

**Languages:** C, Bash, Java, JavaScript, SQL, Python
**Certifications:** AWS Cloud Practitioner (CLF-C02)
**Frameworks:** NumPy, Flask, React
**Tools:** AWS SDK, Git, Azure DevOps, Databricks, GitHub Actions, REST API Development, CI/CD Pipelines