

ANEES MOHAMMED

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EDUCATION

Rutgers University

May 2025

Master of Information Technology (Data Science and Machine Learning)

4.0/4.0

Coursework: Reinforcement Learning, Deep Learning and Neural Networks, Algorithmic Machine Learning, Data Structures and Algorithms, Software Development, Data Mining, Object Oriented Programming, Operating Systems

Birla Institute of Technology and Science ,Pilani

August 2018 - August 2022

B.E. Electrical and Electronic Engineering

3.6/4.0

EXPERIENCE

Slice

June 2022 - August 2024

Software Developer

- Introduced Account Aggregator SDK to acquire users bank and credit details using Android native Kotlin for Slice mobile application, improving exchange of financial data and boosting gross total value by \$100M
- Drove rapid user adoption of the Account Aggregator feature, achieving a 60% adoption rate within the first 2 months of launch. This successful feature rollout streamlined financial data exchange and resulted in a 45% increase in user engagement with core financial features within the app
- Engineered a suite of reusable UI widgets, driven by a backend architecture leveraging AWS and Kubernetes for services and deployment orchestration, and built with Java REST APIs. This backend-driven UI system enabled seamless integration across 5+ platforms, cutting new feature development time by 40% and improving consistency in user experience
- Reduced launch time from 7 to 1.5s, promoting retention by 30% through lazy initialization with Dagger and ProGuard
- Built a Retrieval-Augmented Generation (RAG) pipeline for an enterprise search engine using LangChain, LLamaIndex, and GPT-3.5, improving query accuracy by 45% and reducing response time by 60%
- Collaborated with engineering to design and present a semantic search mechanism using FAISS(Facebook AI Similarity Search). Clearly explained its benefits for efficient indexing and large-scale structured and unstructured data retrieval, achieving 76% optimized search performance for large datasets
- Deployed and scaled the enterprise search engine on AWS with monitoring via Prometheus and Grafana, ensuring 99.9% uptime and processing over 20,000 queries daily

Samsung

July 2021 - December 2021

Software Engineering Intern

- Spearheaded development of a GPU-based proof of concept for 5G antenna signal transmission to transition from a CPU-based architecture, leading to a 300% reduction in organizational costs
- Implemented CUDA for parallel computing, leveraging Nvidia Nsight to debug and optimize performance, and utilized GCC to improve processing speed by 60%
- Optimized thread hierarchy and memory layout, resulting in substantial improvements in processing efficiency , slashing compile time of complex files up to 400%
- Achieved a drastic runtime reduction from 12 to 0.23 seconds by implementing containerized development using Docker

RELEVANT PROJECTS

Facial Emotion Recognition | OpenFace, TensorFlow, NumPy, ResNet

September 2024

- Created a deep learning model capable of detecting and categorizing human emotions with an accuracy of 87%
- Employed genetic algorithms to train and validate models; extracted Action Units via OpenFace to generate a CK+ dataset of 2.1M test faces

Depth Regression Model for RGBd Images | Python, TensorFlow, CNNs, NumPy, Keras

October 2023

- Designed and implemented an ensemble model combining GlobalDepthNetwork (global scene structure) and Local-GradientNetwork (fine-grained spatial details) for high-accuracy depth prediction
- Achieved a performance accuracy of 92% using MSE, RMSE, and MAE metrics
- Utilized TensorFlow/Keras for the neural network, training on an RGBd dataset and visualizing depth maps for analysis

SKILLS & CERTIFICATIONS

- Languages:** Python, Java, Kotlin, C++, Golang, Swift, JavaScript, CUDA, Rust, Solidity, React, Angular, Linux
- Cloud & DevOps:** [AWS \(Certified Developer – Associate\)](#), Kubernetes, CI/CD Pipelines, Containerization, Azure, CloudFormation, DynamoDB, ECS
- Software Development Tools:** AWS, Git, Kafka, MapReduce, MySQL, Databricks ETL, Docker, Postman, Firebase, VSCode, Grafana, Snowflake, YAML, MongoDB, Jenkins, Redis, Apache Spark, Hadoop, RabbitMQ
- ML Techniques:** TensorFlow, OpenFace, Computer Vision, Genetic Algorithms, NLP, Neural Networks, Time Series