# Mohammed Khubaib

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#### Education \_

Florida International University (FIU)

Aug 2025 - May 2027

Master of Science in Computer Science

Osmania University
Bachelor of Engineering in Computer Science and Engineering

August 2020 - June 2024

ce and Engineering CGPA: 3.68

• Coursework: Data Structures & Algorithms, Design and Analysis of Algorithms, Operating Systems, Database Management Systems, Computer Networks, Distributed Systems, Artificial Intelligence, Machine Learning, Deep Learning

## Experience \_

OuSpark, (website ♥) | (Documentation ♥)

Oct 2024 - present

Cross Platform Application Developer | Data Engineer | Site Reliability Engineer

- Engineered ETL pipelines to ingest, clean, and transform 20,000+ academic records, enabling automated reporting.
- $\bullet \ \ \text{Optimized PostgreSQL schemas and tuned SQL queries to improve analytics dashboard performance, cutting query latency by 30\%.}$
- Developed automation scripts in Bash & APIs in Golang to streamline workflows, improving reliability & reducing manual operations.
- Containerized Golang services with Docker and applied multi-stage builds to optimize image size and deployment efficiency.
- Developed a cross-platform application with Flutter, providing students with results analytics tools, and personalized dashboards.
- Achieved 5,000+ downloads and scaled the platform to process and manage 20,000+ academic results through automated data analytics
  pipelines and workflows.

#### Google Developer Students Club, (GDSC MCET)

Aug 2023 – July 2024

Lead: Cloud and DevOps Core Team

- Led the Cloud & DevOps team, driving adoption of Google Cloud technologies & mentoring 100+ students through workshops.
- Architected and deployed solutions using Google Cloud Platform (GCP) services, including Compute Engine, Cloud Run, Cloud Functions,
   Cloud Storage, Cloud Build, Artifact Registry, and Google Kubernetes Engine (GKE).
- · Automated infrastructure provisioning and management with Terraform, streamlining cloud resource deployment and configuration
- Delivered interactive dashboards 🗗 and scalable cloud-native applications, integrating CI/CD pipelines and containerized workloads for reliability and efficiency.

### **Projects**

## Cloud-Native Task Manager Application ( $\underline{\text{Documentation}}$ $\underline{\text{C}}$ )

- Implemented a cloud-native, Task Manager with FastAPI backend and PostgreSQL database, incorporating DevOps practices.
- Produced streamlined DevOps pipelines by automating CI/CD with GitHub Actions, containerizing services with Docker and Docker Compose, and deploying SHA-tagged images to DockerHub and GitHub Container Registry (GHCR).
- Orchestrated scalable deployments on Kubernetes with Helm; integrated CI/CD pipelines for resilience; implemented GitOps (ArgoCD) for automated rollbacks and recovery.
- Deployed and managed infrastructure on AWS using Terraform and Docker, orchestrating services with Kubernetes.
- Technologies: Python, UV, FastAPI, Streamlit, PostgreSQL, Docker, Kubernetes, Helm, GitOps (ArgoCD), GitHub Actions.

#### DeepRespNet (GitHub Repo 2)

- Researched 🗷 deep learning approaches to classify respiratory diseases from auscultation audio, aiming at automated diagnosis.
- Engineered data pipelines with Airflow to ingest, clean, and transform raw auscultation audio into structured spectrogram datasets.
- Designed deep learning classifiers, tracked experiments with MLflow, and deployed the classifiers via BentoML with a FastAPI layer for secure REST API access; implemented user verification with PostgreSQL storing encrypted API keys.
- Built an interactive User Interface for end users to interact with the Deep Learning Model.
- Technologies: TensorFlow, Keras, NumPy, Pandas, BentoML, FastAPI, Pydantic, Streamlit, PostgreSQL, Docker, Docker Compose.

#### Skills \_

Data Engineering & ETL: Apache Airflow, Apache Kafka, Apache Flink, Kestra, Apache Spark, Apache Hadoop, Prefect

DevOps & MlOps: Linux, Docker, Kubernetes, Helm, IaC(Terraform, Ansible), Nginx, GitHub Actions, Jenkins, GitOps (ArgoCD), Prometheus, Grafana, MLflow, BentoML

Cloud Platforms: Google Cloud (Compute Engine, Cloud Run, Cloud Functions, Cloud Storage, BigQuery, Pub/Sub, Vertex AI, GKE, Cloud Build, Artifact Registry), AWS (EC2, Lambda, S3, ECR, EKS, CodeBuild/CodePipeline), OpenStack

Programming & Databases: Python, Dart, Golang, Shell Scripting, SQL (Postgres, MySQL, SQLite), SQLAlchemy, MongoDB, Redis, GraphQL

Frameworks & Tools: Flutter, FastAPI, Pydantic, Pandas, NumPy, TensorFlow, Keras, Scikit-learn, SciPy, UV, Streamlit, MkDocs, Tableau, Microsoft (Power BI, Excel), Git, Postman, Supabase, Astronomer, Upstash, Figma, Rive