

Abdullah Mohammed Alrefaey

Software Development Engineer

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EDUCATION

Cairo University - Faculty of Engineering,
Bachelor of Science: Systems and Biomedical Engineering

Sep 2016 – Jul 2021
Giza, Egypt

EXPERIENCE

Grinta, Software Development Engineer ☑

Oct 2023 – present
Giza, Egypt

- **Developing** and **integrating** backend APIs using a **microservices architecture** with **AWS services** (Lambda, Step Functions, DynamoDB, S3, SNS, SQS, EventBridge Schedulers, Cognito, API Gateway, Secrets), utilizing Python for **serverless** development to optimize performance and scalability.
- **Playing** a key role in **developing** and **enhancing** major features for **Ana Al Ahly** mobile app, including a comprehensive **Loyalty and Pointing System** enabling users to redeem and invest points, a Match Section displaying matches data by integrating with third-party APIs for fetching data in real-time, and the integration of the **Paymob POS solution** for payment processing.
- **Ensuring** high availability and reliability for over **500,000** users through effective use of AWS cloud technologies, **collaborating** with backend developers, and **improving** project maintainability by documenting APIs and services.

PROJECTS

Graduation Project, Python, PyQt5, PyTorch, Linux, AWS, Flask ☑

- Developed a 3DSlicer plugin to analyze cardiac CT scans and assess health risk factors, integrating a **Deep Learning** model for segmentation and image processing.
- Included a **Flask** server for **cloud processing**, deployed on an **AWS EC2** instance.

Ticket Market, Node.js, Next.js, Bull.js, TypeScript, MongoDB, Redis, NATS, Stripe, Jest, Docker, Kubernetes ☑

- Developed a microservices-based **e-commerce** app with a **Node.js** backend and **Next.js** frontend, authenticated by **JWT**.
- Utilized **MongoDB**, **Redis**, **NATS**, and **Stripe**, with unit testing in **Jest**, background workers in **Bull.js**, and **CI/CD** via **GitHub** and **Kubernetes**.

Healthcare CMMS, Node.js, Express.js, SQLite, Sequelize, Bootstrap, Socket.IO ☑

- Developed a web-based maintenance management system with live notifications using **Socket.IO** ☑.

StoryBooks App, Node.js, Express.js, Mongoose.js, Materialize, OAuth 2.0 ☑

- Developed a web-based story posting app with **OAuth 2.0 Google API** authorization, using **MVC architecture**.

TECHNICAL SKILLS

Programming Languages: *Python | Javascript | Typescript | C/C++ | Java*

Technologies: *AWS | Git | Docker | Kubernetes*

Backend Frameworks: *Boto3 | Moto | Node.js | Express.js | Jest | Flask | Meteor.js | Socket.IO* ☑

Frontend Frameworks: *Angular | React.js | Next.js | PyQt*

Databases: *DynamoDB | Redis | MongoDB | SQLite | Sequelize*

VOLUNTEER WORK

Representative of Biomedical Engineering Class 2021

- Managed lecture schedules and admin tasks, and facilitated communication between students and TAs.

International Student Conference 2019, IT & Registration Member ☑

- Designed registration tickets and emails, and managed attendee registration and records.