

# Omar Kassem

## Software Engineer

(+20) 100 040 6314 | omarkassem099@gmail.com | Github | LinkedIn

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## Summary

Software engineer with three years of professional experience, passionate about learning and adapting to new technologies. Known for being a quick learner and versatile in various technological environments. Seeking opportunities to leverage technical expertise, leadership skills, and strong communication abilities to contribute to impactful and innovative projects.

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## Professional Experience

### Software Engineer

*Codescalers – October 2022 – Present*

- Maintaining and developing new features for Threefold Solutions, the world's largest P2P infrastructure provider.
- Developing TypeScript packages for the TFGrid-SDK-TS monorepo, which includes the Threefold Dashboard and connects with TFChain and GridClient.
- Introduced a service monitor package that allows the Dashboard and Grid-Client to ping third-party services on separate stacks, switching to the next stack if one fails.
- Added a chain event listener in the TFChain client — a generic function that accepts validation keys and returns target event information.
- Created a Vue-based Threefold Stats website to visualize real-time grid statistics, and provided a lightweight summary endpoint using Nginx and JavaScript to return JSON data without requiring backend services.
- Tech Stack: TypeScript, Vue, Vuetify, Node.js, Svelte, Lerna, Polkadot JS, Flutter, Docker, Kubernetes, GitHub Actions, GraphQL

### Software Engineer Intern

*Codescalers – July 2022 – September 2022*

- Built Go projects integrated with Svelte front-end applications, including unit testing, Docker image creation, and Kubernetes container orchestration.
- Worked on CSHR, a comprehensive HR management system built using Django, DRF, Svelte, and REST API.

### Freelance Mobile Developer – React Native

*RXA Construct – October 2024 – February 2025*

- Developed and maintained features for the **RXA Construct** mobile application using React Native, improving user experience and app performance.
  - Fixed critical bugs related to navigation, state management, and API integrations, increasing app stability.
  - Collaborated with the backend team to integrate RESTful APIs and ensure seamless data flow.
  - Ensured cross-platform compatibility and optimized performance across a wide range of Android and iOS devices.
  - Successfully released the updated app to both **Google Play Store** and **Apple App Store**.
  - Visit Project Website
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## Education

### Faculty of Engineering – Mansoura University

Computer Engineering and Systems Department | Bachelor's Degree

July 2017 – August 2022

Cumulative Grade: 76% (Very Good)

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## Skills

- **Languages:** JavaScript, TypeScript, Go, Dart, C++, Python
  - **Technologies:** Vue, Node.js, Flutter, React Native, Linux, AWS Services, CloudFormation, OOP, REST API, Git, SQL, NoSQL, HTML, CSS, Django, Terraform, Svelte, GitHub Actions, Docker, Kubernetes, Helm
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## Projects

### RESP.js

A TCP server implementation that processes Redis-like commands using Node.js's net module and Mocha for unit testing.

### TF-Umbrel/WordPress

Docker setup to run Umbrel OS and WordPress on the ThreeFold Grid, with shell scripts, Nginx, and CI/CD pipelines via GitHub Actions.

### INI Parser

Built in Golang; parses INI files by extracting sections, maintaining values, and exporting parsed data back to INI format.

### LitFair Server (Graduation Project)

Developed backend for an AI-powered recruitment platform using Express, Mongoose, Sequelize, Multer, Passport.js, and Cloudinary.

**Udagram**

Deployed a high-availability web app using AWS CloudFormation, EC2, VPC, and S3 buckets.

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**Leadership & Activities**

- **Computer Science Circle Leader** – CAT Reloaded (Jan 2021 – Oct 2021)
  - **Technical Member** – ICPC Mansoura (Oct 2020 – Oct 2021)
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**Achievements & Certifications**

- Professional Front-End Web Development Nanodegree – Udacity
- Web Development Using Node.js and Angular – NTI