

#### Software Development Engineer

O London, UK

+447455518922

✓ markm.rofail@gmail.com

github/markrofail

#### **EXPERIENCE**

#### SOFTWARE DEVELOPMENT ENGINEER II

Amazon, London, UK November 2022 – Present

- Spearheaded the primevideo.com Ads project, working with cross-functional teams to orchestrate required changes across numerous microservices using feature flags.
- Executed primevideo.com detail page redesign, coordinating with product and UX teams to deliver a customer-centric experience.
- Ideated a chrome-extension for on-call engineers that enhances debugging and offers insights into website traffic, thereby streamlining incident resolution.
- Actively engaged in a comprehensive on-call rotation, providing critical support and maintenance for the primevideo.com website.

#### SOFTWARE DEVELOPMENT ENGINEER II

GoCardless, London, UK October 2021 – October 2022

- Supervised and contributed to developing a fraud prevention tool tailored for merchants, leveraging open-banking service integrations.
- Implemented and deployed a machine-learning server to oversee direct-debit transactions, achieving a 15% reduction in fraudulent payments.
- Engineered a sophisticated payment intelligence dashboard, empowering merchants to tailor fraud checks, balancing customer experience and fraud protection.

#### JUNIOR BACKEND ENGINEER

Shahry, Cairo, EG July 2020 – September 2021

- Migrated customer's user tokens to Knox tokens seamlessly, increasing API-Application security without causing any logout incidents by updating database-stored in-use tokens.
- Created a specialized microservice for third-party integrations to limit monolith service deployments when making vendor-specific changes.

#### JUNIOR SOFTWARE ENGINEER

Informatica Middle East, Alexandria, EG June 2019 – June 2020

### **EDUCATION**

#### GERMAN UNIVERSITY IN CAIRO BSC. COMPUTER SCIENCE AND ENGINEERING

September 2014 - June 2019 | Cairo, EG

GPA: 3.9 / 4.0 | Highest Honors

#### **SKILLS**

Programming Java, Typescript, Python
Frameworks Spring, React, Django
Testing Mocha, Jest, Pytest, Cypress
Database PostgreSQL, DynamoDB

#### PROJECTS & PUBLICATIONS

#### **ICVES PUBLICATION**

Multi-Modal Vehicle Attack Detection

**Technology** Tensorflow, Python

- Simulated camera-based attacks by manipulating the vehicle's camera feed.
- Manufactured a multi-modal module to identify discrepancies between the vehicle's image and LiDAR sensors.

#### **GOOGLE SUMMER OF CODE**

PostgreSQL Contributor

Technology C, C++

- Enabled GIN index-scan between polymorphic array types by adding new operators.
- Optimized query performance from 25ms to 2ms using a GIN index, compared to the original work.

# LEADERSHIP & AWARDS CODE CHALLENGE WORKSHOPS 2022

Conducted bi-weekly Ruby coding challenge sessions for new hires.

## GOOGLE GSOC MENTOR 2021

Mentored student throughout their PostgreSQL project.

## **BACHELOR PROJECT SUPERVISOR** 2021

Supervised three undergraduate students in their bachelor projects.

## HACKTOBERFEST AWARD 2020

Successfully made for open-source contributions during October.

## ICVES BEST PAPER AWARD 2019

Selected as the best paper out of 54 submissions.