

# Mark Rofail

📍 London, UK

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## Experience

### Software Development Engineer II

Amazon

November 2022 – Present | London, UK

- Led the primevideo.com Ads project, boosting ad engagement by 15% through feature flag-driven changes across 50+ microservices, enhancing customer experience.
- Drove the primevideo.com detail page redesign, achieving a 21
- Architected an automated chaos-testing workflow, improving system stability by 30% and resolving memory leaks in distributed systems.
- Ensured 99.99% uptime for primevideo.com by leading on-call rotations and delivering critical support for service availability.

### Software Development Engineer II

GoCardless

October 2021 – October 2022 | London, UK

- Led development of a fraud prevention tool, reducing fraudulent payments by 23% through open-banking integration and machine learning, in collaboration with data analysts and product managers.
- Enhanced fraud detection accuracy by 27% by deploying a machine-learning server to monitor direct-debit transactions, improving system resilience.
- Engineered a payment intelligence dashboard, boosting merchant satisfaction by 31% by enabling customized fraud checks based on data insights.

### Software Development Engineer

Shahry

July 2020 – September 2021 | Cairo, EG

- Reduced monolith deployments by 40% by building a microservice for third-party integrations, streamlining vendor-specific updates and enhancing deployment efficiency.

### Software Development Engineer

Informatica Middle East

June 2019 – June 2020 | Alexandria, EG

## Education

### BSc. Computer Science

German University in Cairo

September 2014 - June 2019 | Cairo, EG

GPA: 3.9 / 4.0 | Highest Honors

## Skills

Programming	Python, Ruby, Typescript, Java
Frameworks	Django, FastAPI, Rails, React
Testing	Pytest, Jest, Selenium, Cypress
Database	PostgreSQL, MongoDB
DevOps	Docker, AWS, Kubernetes

## Projects & Publications

### ICVES Publication

Multi-Modal Vehicle Attack Detection [🔗](#)

Technologies: 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 [🔗](#)

Technologies: 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

### Coding Workshops - 2022

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

### Best Hackathon Project - 2022

Developed a Slack-bot to capture individual achievements to streamline referencing during performance evaluations.

### 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.