Mark Rofail

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Experience

Software Development Engineer II
Amazon
November 2022 – Present   London, UK
- Achieved a 15% increase in ad engagement rates by leading the primevideo.com Ads project, orchestrating feature flag-driven changes across 50+ microservices, and collaborating with cross-functional teams to enhance customer experience.
- Boosted user satisfaction scores by 21% by directing the redesign of the primevideo.com detail page, working closely with product managers, UX designers, and engineers to implement data-informed improvements.
- Improved system stability by 30% by architecting an automated chaos-testing workflow to identify and resolve memory leaks in distributed systems, enhancing the resilience of services.
- Maintained 99.99% website uptime by actively participating in on-call rotations, providing critical support for primevideo.com and ensuring high availability of services.

Software Development Engineer II
GoCardless
October 2021 – October 2022   London, UK
- Reduced fraudulent payments by 23% by leading the development of a fraud prevention tool for merchants, integrating open-banking services and machine learning, and collaborating with data analysts and product managers.
- Increased fraud detection accuracy by 27% by implementing a machine-learning server to monitor direct-debit transactions, enhancing system resilience against fraudulent activities.
- Enhanced merchant satisfaction scores by 31% by engineering a payment intelligence dashboard, empowering merchants to customize fraud checks based on data insights, balancing customer experience and fraud protection.

Software Development Engineer
Shahry
July 2020 – September 2021   Cairo, EG
- Reduced monolith deployments by 40% by developing a specialized microservice for third-party integrations, streamlining vendor-specific changes and improving 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 ↗
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

Coding 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.