

# Ahmed Ismail

Senior Full-stack  
Engineer

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## Ahmed H. Ismail

Porto, Portugal

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## Who



## Summary:

Senior full-stack engineer and technical lead with 10+ years shipping modern web products and high-throughput services. Product minded and comfortable owning features end to end across React and Next.js on the frontend and Node and Nest on the backend, with strong data modeling in Postgres/Timescale and caching in Redis. I have built AI-powered and real-time experiences, run Elasticsearch in production for custom relevance, and used Kafka for messaging at scale. Quality and reliability are non-negotiable for me: typed contracts, automated tests, CI, observability, and clear performance budgets. Infra experience includes Docker, AWS, Kubernetes on EKS, GitOps with FluxCD, and IaC with Pulumi, plus Terraform familiarity. Based in Porto, Portugal, I can engage internationally via my Portuguese LLC and keep solid overlap with EU and US time zones.

## Core Stack:

- TypeScript, React, Next.js, Tailwind
- State management (Redux/RTK, React Query)
- Node.js/NestJS, RPC/REST
- Postgres/Timescale, Redis and Elasticsearch
- Testing (Vitest, Playwright, Jest)
- C++ & Python
- Docker, AWS, GCP, kubernetes, pulumi & fluxCD
- Websockets and SSE for real time UIs and streaming

## Natural Languages:

Arabic: Native

English: Fluent

Português: Intermediate

## Strengths:

- Real time UX: SSE and WebSockets, optimistic UI, low time-to-first-byte and p95 targets
- AI features: OpenAI, RAG, prompt versioning, function calling, eval harnesses, safe streaming
- Search and messaging: Elasticsearch relevance tuning and custom ranking, Kafka consumer groups and lag controls
- Observability: Datadog or Prometheus, Grafana, Loki, OpenTelemetry tracing, SLOs on p95 and p99. Being data driven
- Testing and CI/CD: Vitest or Jest, Playwright, contract tests, GitHub Actions, trunk-based development, feature flags, canaries, quick rollback
- Security and privacy: input validation, authz boundaries, rate limiting, secrets hygiene, least-privilege IAM
- Infra and platform: Docker, AWS, Kubernetes on EKS, GitOps with FluxCD, Pulumi for IaC, Terraform familiarity
- Performance: profiling hot paths, query tuning with EXPLAIN or ANALYZE, caching strategies, connection pooling
- Architecture: modular monoliths and microservices, BFF patterns, multi-tenant SaaS, session and read-after-write consistency strategies
- Collaboration and leadership: mentoring, code reviews, concise design docs, clear specs with product and design, steady delivery in distributed teams

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## Programming languages & Tools

**Programming Languages:** C++, C, Javascript, Typescript, Python, Ruby, Prolog, Rust & Java.

**Frameworks:** Ruby on Rails, django, flask, sinatra, nodejs, Nextjs, React & Nestjs.

**Tools & Services:** Redis, memcached, nginx, Postgresql, MongoDB, DynamoDB, AWS lambda, ElasticSearch, kafka, RabbitMQ, TimescaleDB & docker.

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## Professional Experience

### Refound / Software Engineering Manager

Feb 2025 - May 2025, Remote

Lead architect and team lead on an agentic leadership coaching platform. Working with React, Next.js and Python.

- 5k active users
- Leading a team of 5 engineers
- Introduced CI/CD pipeline
- High test coverage using vitest and playwright

### Tari Labs / Technical Lead

May 2022 - Feb 2025, Remote

Lead architect and team lead on cross chain web3 data aggregation and analysis platform along with providing developer tooling and infrastructure for the rest of the company. We are proud to boast a 97% code coverage rate while scaling to millions of requests and events per hour. The system is designed as an event driven system analysing data in real time across multiple chains.

### QMedic / Senior Developer

Dec 2018 - July 2019, Remote

QMedic designs its own wearable medical devices, I worked as a full stack developer building internal telemetry and analytics infrastructure for the company. Collecting analytics from IoT devices and visualizing it for stakeholders.

### Dreidev/ Senior Full Stack Developer

Jan 2017 - Nov 2018, Remote

Full stack developer for a software house. Continuously delivered webapps with a focus on usability, seamless and intuitive UX. First fully remote role, allowed me to attain the experience and skills to self manage and continuously deliver value in a remote workplace.

### Paymob/ Software Engineer

Jan 2016 - Dec 2016, Cairo, Egypt

Gained experience working in the fintech industry gained ability to understand and translate regulatory requirements to project specifications. Worked on highly scalable backends for mobile wallets.

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**Eventtus / Software Engineer**  
Sep 2015 - Jan 2016, Cairo, Egypt

Event organization and tracking platform. Modernized an aging codebase. From PHP to Ruby on Rails. Did so incrementally with piecewise modernization and gradual rollout of services.

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## Education

**German University in Cairo / BSc. Computer Science**  
2016, Cairo, Egypt

Also participated in google summer of code during the summer of 2014. Working on SPDX python tooling. During my time at the university I also served as a junior teaching assistant in the Software Engineering and introduction to computer science courses.

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## Certifications

**Google Project Management Certification**

<https://coursera.org/share/a57f0a8091446714241be607c548701d>

Comprehensive specialization for project management and how it's done at google. Not only qualifies me to work as a project manager but helps make me a much better technical lead.

**Postgresql for everyone certification**

<https://coursera.org/share/dc3ed42f48dbfb3a7ad0f375fd82fc01>

Postgresql techniques and inner workings. Most of the time just using the ORM for everything doesn't cut it.

**AWS fundamentals Certification**

<https://coursera.org/share/c76ba6e13718a31c7262fed9601508d1>

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## Projects

**Askier**

Language: C++  
Application for creating ASCII art from images, videos and live camera feeds. GPU acceleration via OpenCL  
<https://github.com/a-h-i/askier>

**Midas algo trader**

Language: C++  
Algorithmic trader using IBKR API for momentum exploit. Trades futures and high volatility stocks.  
<https://github.com/a-h-i/midas>

**spdx parser**

Language: Python  
Python parser libraries for the SPDX format.  
Done as part of GSoC 2014.

<https://github.com/ah450/sdpx-tool>

**Proteus**

Language: C++  
Speech recognition library generator based on pocketsphinx for multiple languages.

<https://github.com/ah450/proteus>

## [s-python](#)

### **Responder**

Stack: Ruby + Sinatra  
Auto deployment from github web hooks  
<https://github.com/ah450/responder>

### **ObjectRecognizer**

Language: Python  
<https://github.com/ah450/ObjectRecognizer>  
Naive Bayes classifier

### **Ngmedia**

Stack: Angularjs.  
<https://github.com/ah450/ngmedia>  
Angular directive to remove elements based on media query match

### **Rootkit**

Language: C  
<https://github.com/ah450/rootkit>  
Rootkit for linux kernel 3.x

### **SIFT**

Language: C++  
<https://github.com/ah450/SIFT>  
Scale Invariant Feature Transform implementation

### **Evaluator**

Stack: Angularjs, Rails.  
<https://github.com/ah450/evaluator>  
Java submission runner and evaluator for German University in Cairo

### **Unification**

Language: Python  
<https://github.com/ah450/unification>  
FOPL unification and CNF conversion

### **AI2048**

Language: Golang  
<https://github.com/muhammedabuali/AI2048>  
artificial intelligence course project for the famous 2048 game