

Islam Magdy

Tech Lead — Nationale-Nederlanden

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PROFILE

Tech Lead at Nationale-Nederlanden, building agentic AI systems and the tooling that brings them into a regulated bank's delivery. Author of Ktesio, an open-source engine that runs AI agents like services, and of Atlas, an internal agentic CLI that grew from one team to teams across the bank and the wider NN Group. 15+ years in software and leading engineering teams since 2015, across regulated fintech, high-traffic e-commerce in the Middle East, and a co-founded ride-hailing startup.

- **Agentic AI Systems** — Agent runtimes, lifecycle supervision, per-call token metering, and cost governance; Ktesio in the open, Atlas inside a regulated bank
- **Agentic AI in the SDLC** — Spec-driven development, agent-assisted review, and the DORA visibility to steer them, adopted inside a regulated bank's delivery lifecycle
- **Engineering Leadership** — Cross-functional teams of engineers, UX, and customer-journey specialists; technical roadmaps, architecture standards, and adoption of new tooling
- **FinTech Platform Engineering** — Mortgage servicing on serverless AWS: customer-facing repayment tools, notary-integrated automation, and incremental replacement of live Java systems
- **E-commerce Systems** — Serverless backends and React storefronts for retail groups across the Middle East: Majid Al Futtaim, Al Tayer, Ounass

Agentic AI — Agent runtimes · MCP · LLM integration · CrewAI · agentic CLIs and developer tooling

Core stack — Node.js & TypeScript · Rust · AWS serverless · Firebase · React, React Native & Lit · GraphQL · PostgreSQL · DynamoDB · MongoDB · GitHub Actions

SELECTED WORK

- **Ktesio** — Open-source Rust engine that runs AI agents like services: lifecycle supervision, per-call token metering, and dollar budgets that stop runaway spend. Published to crates.io; docs at docs.ktesio.dev
- **Atlas** — Internal agentic CLI for PR review and backlog work; started in one team, now used by teams across Nationale-Nederlanden and the wider NN Group
- **Loan redemption automation** — Event-driven redemption flow integrated into notaries' own systems, replacing manual form intake across hundreds of thousands of active mortgage loans
- **Java → serverless migration** — Live mortgage-servicing components replaced incrementally with Node.js on AWS, retiring the team's dependency on Java specialists

EXPERIENCE

Dec 2021 – Present · Rotterdam, Netherlands · Tech Lead since Jul 2022

NATIONALE-NEDERLANDEN — TECH LEAD

Joined as a Senior Full Stack Engineer to build the customer-facing repayment tools; promoted to Tech Lead after seven months. Now leading a cross-functional team of 7 — 4 engineers, a UX designer, and customer-journey specialists — modernizing the mortgage-servicing platform at one of the Netherlands' largest financial institutions and bringing agentic AI into how the bank delivers.

- **Atlas, internal agentic CLI** — Designed and built an agentic CLI for PR review and backlog work, then drove its adoption from one team to the rest of the mortgage domain, teams across the bank, and the wider NN Group
- **Agentic AI in the SDLC** — Led the introduction of agentic AI into the team's delivery lifecycle, from spec-driven development to agent-assisted review, and used the DORA visibility it created to raise release cadence, cut lead time, and make roadmap delivery predictable
- **Agentic enablement** — Ran a full-day hands-on CrewAI workshop for 21 engineers across the mortgage domain's teams, the on-ramp that took Atlas beyond the team
- **Loan redemption automation** — Led end-to-end automation of repayment simulations, full redemptions, and annual mortgage statements across hundreds of thousands of active loans: manual form intake via advisors and notaries became an event-driven flow integrated into the notaries' own systems, where they now initiate and track requests themselves, cutting manual processing and notary calls
- **Repayment tools** — Built the customer-facing Node.js applications on AWS that mortgage customers use to simulate and execute repayments
- **Legacy modernization** — Leading the incremental replacement of mortgage-servicing components from Java to serverless Node.js on AWS, retiring the team's dependency on Java specialists
- **Architecture and roadmap** — Owning the architecture standards the team's services are built against and the technical roadmap agreed with product, UX, and customer-journey stakeholders
- **Team:** 7 cross-functional — 4 engineers, UX, customer journey
- **Scale:** Hundreds of thousands of active loans
- **Migration:** Java → serverless Node.js on AWS

May 2018 – Jun 2021 · Istanbul, Turkey · Dubai, UAE · Cairo, Egypt

VNGRS — SENIOR FULL STACK ENGINEER

Built serverless backends, React storefronts, and their Node.js backend-for-frontend layers for retail groups across the Middle East — Majid Al Futtaim, Al Tayer, Ounass, Gap — and a US e-commerce client, in teams distributed across Istanbul, Dubai, and Cairo.

- **Mall app backends** — Serverless backend APIs powering the Mall of the Emirates and City Centres apps, in production across Majid Al Futtaim's malls
- **Smart Parking** — Serverless backend for the Mall of the Emirates Smart Parking feature, linking the mall's car parks to the app for find-my-car, availability, and payment
- **Retail storefronts** — React storefronts and the Node.js backend-for-frontend layer for Al Tayer's brands, including Mamas & Papas and Gap, and for Ounass
- **WhatsNeu (US)** — Laid the foundations for WhatsNeu's move off Shopify: Firestore data model, Cloud Functions, and a Lit front end on Firebase

Product videos: Smart Parking · Mall of the Emirates app

Feb 2017 – Apr 2018 · Cairo, Egypt

SHEENVALUE — TECHNICAL LEAD

Led engineering for a K-12 education technology company, across its web and mobile teams.

- **Engineering leadership** — Managed the engineers building the front-ends and back-ends of Sheenvalue's education products
- **Curriculum and student management** — Built the curriculum and student-management system used by K-12 schools
- **StoryFile mobile app** — Shipped the StoryFile app in React Native
- **Engineering standards** — Made code review the default and introduced shared development tooling across the web and mobile teams

Feb 2016 – Feb 2018 · Cairo, Egypt

HATAXI — CO-FOUNDER & TECHNICAL LEAD

Co-founded a ride-hailing startup and took its platform from zero to a live launch in Cairo, with drivers on the road and real rides, in parallel with the SkyKode and Sheenvalue roles.

- **Platform from zero** — Built the ride-hailing APIs, real-time driver matching on MongoDB geospatial queries, and the operations admin console

Aug 2015 – Jan 2017 · USA · remote from Cairo, Egypt

SKYKODE — TECHNICAL LEAD

Led development of **KodingLab**, an educational SaaS platform for computer science programs at colleges and universities.

- **KodingLab** — Built the browser-based IDE, auto-grading engine, and real-time student–instructor collaboration
- **Distributed team** — Managed the engineering team in Egypt for a US company; established coding standards and development workflows

Product videos: KodingLab · KodingLab for education

2008 – 2016 · Cairo, Egypt

EARLIER ROLES

- **Elmenus — Senior Front-End Engineer (2016, contract)** — Built the search module for Egypt's leading restaurant-discovery platform
- **Mostaqgel — Senior Front-End Engineer (2014 – 2015)** — Led front-end delivery for Egypt's first freelancing platform (later Worcbox); adopted Web Components early and built real-time WebSocket features
- **Nilecode — Senior Front-End Engineer (2011 – 2014)** — Built client front-end projects and rescued failing ones
- **Freelance Front-End Engineer (2008 – 2011)** — Client work across Egypt, Saudi Arabia, and the US

Check <https://in1t.com> for the most recent version of my resume

T H A N K Y O U

LAST UPDATED: 11 SEPT 2026