

# Muhammad Hamdan

Lead backend and platform engineer

muhammadhamdan062@gmail.com · github.com/Rorrschach · linkedin.com/in/muhammadhamdan1 · muhammadhamdan.dev  
Remote (UTC+5), full UK and EU overlap. Open to remote roles, full time or contract, and open to relocating. I can work as a B2B contractor, through an employer of record, or on a permanent contract, and relocation is on the table.

I lead development on a white-label platform that turns fund data into regulated PDF factsheets for 18 UK wealth managers. The rendering engine, the job queue behind it and the Excel import that feeds it are mine.

## EXPERIENCE

**Lead developer** Mabel Insights Sep 2024 to present  
Remote, full time

- One rendering engine serves 18 UK wealth management firms: 91 template generator classes, an 85 member template enum and 76 bundled brand fonts. Onboarding a client is a configuration file and a template class, never a fork.
- A publish run is a BullMQ flow: a parent ZIP job blocked on every child PDF job, deterministic job IDs so a double-clicked publish renders once, retry with backoff, and a ZIP streamed into an S3 multipart upload so memory stays flat.
- Diff-based Excel importer across 19 tab modules with cell-level validation that reports failures by tab, row and column. Rows are fingerprinted structurally, so reordering is not a change and an operator sees only the cells that will move.
- Charts drawn with D3 on the server and rasterised with node-canvas into the PDF, with a hand-written tick algorithm, because no headless browser sits in the render path.
- Cognito JWKS authentication, role-based access control and a cross-tenant isolation guard, with draft and live output kept in separate per-tenant S3 namespaces.

**Software engineer** Mslm Feb 2024 to Sep 2024  
Hybrid, full time

- Built a large-scale IP scraping and analysis platform in Go, processing millions of addresses with concurrent workers and backoff.
- Built and published the Python SDK for Oxylabs, live on their official GitHub organisation, covering push-pull, realtime and proxy integration modes.
- Contributed to an HRMS with a Go backend and a React and TypeScript frontend, including attendance and shift management.

**AI engineer and Python developer** Expert System Solutions Feb 2023 to Feb 2024  
On site, full time

- Led an automated invoice processing system using YOLO v5 and v7, reaching over 90% field detection accuracy.
- Built annotation pipelines over 5,000 invoices and tooling that made annotation ten times faster, plus REST APIs in Django and FastAPI for an IoT device platform with JWT auth and RBAC.

**Front-end intern** JinnByte Jun 2022 to Sep 2022

- Built responsive landing pages and converted static HTML and CSS into React applications.

## PROJECTS

- FitFlix: class-booking marketplace live in Vilnius, built and run solo. Five Next.js apps behind one monorepo, NestJS and Prisma, Revolut payments, cross-app single sign-on.
- Gambit: spec-first autonomous trading system in Python. Ten named invariants, 733 passing tests, three circuit breakers and crash-window order reconciliation. Paper-mode only, and the promotion gate is written into the spec.
- Oxylabs Python SDK: published on the company's official GitHub organisation and still the SDK they ship.

## EDUCATION

**Bachelor of Computer Science** COMSATS Institute of Information Technology 2024

## STACK

TypeScript, Node.js, NestJS, PostgreSQL, Redis, BullMQ, AWS (S3, Cognito), Python, Go, Next.js  
Also: Django, FastAPI, Prisma, SheetJS, pdfmake, D3, node-canvas, Docker, GitHub Actions.