

Momin Khan

Full-stack · AI & Data Engineer · IoT Founder

MAIL mominkhan.prosensia@gmail.com
BASED Graz, Austria
IN linkedin.com/in/mominkj78
GIT github.com/mominkhan2003
PLAY mominkhan.prosensia.pk

SCAN TO PLAY

PROFILE

Full-stack, AI and data engineer who builds products from the sensor to the dashboard. Founder of ProSensia, an AI and IoT startup for predictive maintenance. Master's student in Industrial Data Science & AI at FH JOANNEUM in Graz. Sixty builds across React, Node.js, PHP, Python and ESP32, 55 with video walkthroughs. Looking for a part-time or working-student role in a Graz software team, or projects I can own end to end.

THE STORY SO FAR

CHAPTER 1 ABBOTTABAD 2007 – 2022

The spawn point

I started coding at Army Burn Hall School: Snake and a mind-reading game in C++, a Flappy Bird clone on a canvas, then a complete PHP and SQL e-commerce site for a client.

CHAPTER 2 HARIPUR 2022 – 2026

The founder arc

Founder & CEO, ProSensia (SMC-Private) Limited, 2024 – present

At PAF-IAST I started ProSensia so that air conditioners could warn us before they fail. One company, three missions: predictive-maintenance retrofits, custom IoT devices for universities and offices, and remote internships for students.

- First order came from my own university: a device to control its air conditioners
- 25+ devices built and tested; about PKR 900,000 in grants and support (NIC Islamabad, DoST KP, university funding)
- Ran remote internship batches, 30+ interns in the latest, on tasks, mentoring and certificate platforms I built
- Solo founder across software, AI, hardware and business, with student volunteers on side services

CHAPTER 3 BEHIND THE SCENES 2025 – 2026

Quiet mode

Freelance and product engineer

ProSensia looked quiet from the outside, so I kept building. Most of my sixty builds come from this stretch.

- AI Company Virtual Office: planner, nine specialist agents, permissioned tools, RAG, approval queue
- ProSensia Smart Control: local-first IoT energy platform on React, Express, SQLite and MQTT, in eight generations
- DGST Grant Management: NestJS and React platform covering a government directorate's whole grant lifecycle
- StockPilot 3D: multi-tenant inventory SaaS for Austrian shops in German and English (Phase 1 built)

OPEN TO

- Part-time / working-student role
- Freelance projects
- Long-term remote collaboration

SKILLS

Frontend & 3D
React, Next.js, TypeScript, Tailwind, Three.js, GSAP

Backend & APIs
Node.js (Express, NestJS, Fastify), PHP, REST, JWT, RBAC, Prisma

Databases
MySQL, PostgreSQL, SQLite, Supabase

AI & Agents
LLM agents, RAG, tool permissions, Ollama, provider-agnostic LLM APIs

Data science
Python, R and tidyverse, time-series, classification, honest evaluation

IoT & hardware
ESP32, MQTT, Raspberry Pi, Matter, sensors

Ship & operate
Docker, cPanel, Git, pnpm, Turborepo, Electron

LANGUAGES

Urdu Native
English Fluent
German Learning

Momin Khan

FULL-STACK · AI AND DATA ENGINEER · IOT FOUNDER

CHAPTER 4 FINAL-YEAR THESIS 2025 – 2026

The researcher

IoT predictive maintenance for air conditioners

An ESP32 and a current sensor feed MQTT, FastAPI and a fault classifier. Median latency is 11 ms and a message reaches the dashboard in 1.42 s under load. The IEEE-format paper, written with my supervisor, states its own weak spots: the random split is preliminary and a time-ordered re-test comes next.

CHAPTER 5 GRAZ 2026 – NOW

New map unlocked

I moved to Graz for my Master's and I am talking with the local startup scene about ProSensia. To learn the market I built concept redesigns for Austrian businesses and a platform for a community kitchen. Now I want to build with a software team here.

SELECTED WORK

AI Company Virtual Office

A manager agent plans every request and hands it to nine specialist agents, while a live virtual-office dashboard shows who is doing what.

BUILT

ProSensia Smart Control

Real-time energy monitoring and control for campuses and factories, in eight generations from a Supabase build to a local-first release.

BUILT

AC Predictive Maintenance

My final-year thesis: an ESP32 sensor node reads current and temperature from an air conditioner and a classifier flags faults before the unit fails.

RESEARCH

DGST Grant Management

The whole grant lifecycle for a provincial science directorate: from funding call to a QR-verified completion certificate.

BUILT

StockPilot 3D

Multi-tenant inventory platform for small shops, in German and English.

PHASE 1 BUILT

Mensa Comunista Graz

A platform for a community kitchen in Graz: events, volunteer shifts and donations.

BUILT

60 builds in 30 products. Each card in the portfolio states what is live, built, a concept or research.

EDUCATION

MS Industrial Data Science & AI
FH JOANNEUM, Graz
2026 –

BS Artificial Intelligence
PAF-IAST, Haripur
2022 – 2026

HSSC (IT) and SSC
Army Burn Hall College, Abbottabad
2007 – 2022

WHAT I CAN BUILD

- Web apps and SaaS: React, Next.js, Node.js or PHP
- AI features: agents, RAG, LLM integrations
- Data work: sensor time-series, classification, dashboards
- IoT: ESP32 to MQTT to a live dashboard

CONCEPTS I CAN EXPLAIN

Frontend
Component architecture · Type-safe interfaces · Design tokens & utility CSS · Server-rendered apps · 3D & motion on the web

Backend
REST API design · Authentication & sessions · Roles & multi-tenancy · ORM, schemas & migrations · Relational modelling

AI
LLM integration behind an interface · Agents & tool use · Planning with task graphs · Retrieval-augmented generation · Human-in-the-loop

Data
Sensor time-series · Supervised classification · Honest evaluation · Predictive maintenance · Python for data & automation

IoT
ESP32 & sensors · MQTT messaging · Edge gateways · Matter & device onboarding

Product
Containers · Monorepos & build pipelines · Shipping to real hosting · Local-first software · Discovery to MVP

45 in all, each linked to its projects in the portfolio.

Hire me, or send a project

Scan to play the 3D portfolio and open either door.

mominkhan.prosensia@gmail.com