

ZAKARIA SHAHRURI

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SUMMARY

Final-year Applied Computer Science student at UCLL, on exchange in Shanghai, who builds complete products end to end. Currently building BionicMeal, an AI nutrition app, solo across mobile, web, backend and Azure, next to freelance websites for local businesses. Won an international 24-hour hackathon and a robotics race in the same month. Strongest in Java/Spring Boot, Python and Azure; works in English, Dutch and Spanish.

EDUCATION

UC Leuven-Limburg (UCLL) <i>Bachelor of Applied Computer Science, Cum Laude (expected)</i> Relevant coursework (all 16+/20): Cloud Native Engineering · Server & System Management · Data Engineering · Data Analytics & Machine Learning	Leuven, Belgium Sep 2024 – Jun 2027
Shanghai Polytechnic University (SSPU) <i>Exchange semester, Applied Computer Science</i> Relevant coursework: Distributed Computing (Scala, Apache Spark) · Data Structures & Algorithms · Advanced Mathematics in C	Shanghai, China Sep 2026 – Jan 2027

EXPERIENCE

BuildBase (Strouwi BV) <i>Junior Full-Stack Developer</i> - Built a workflow platform for employee onboarding and absence approvals (Vue.js, Spring Boot REST API, MongoDB), adopted by the team to replace email-based sign-off chains. - Replaced client polling with WebSocket push, so reviewers saw approval changes live without refreshing. - Shipped in two-week Scrum sprints to an OKD (OpenShift) cluster and reviewed teammates' pull requests.	Leuven, Belgium Sep 2025 – Jan 2026
Freelance Web Developer <i>Self-employed</i> Delivered 3 websites for local businesses, including restaurants and a Christmas-card company, as sole developer from requirements to launch: Next.js and TypeScript, Sanity or Supabase back ends, deployed on Vercel and tuned for Core Web Vitals.	Leuven, Belgium (Remote) Feb 2026 – Present

PROJECTS

BionicMeal — AI-assisted nutrition tracker for mobile and web <i>React Native/Expo · Next.js · FastAPI · PostgreSQL/pgvector · Redis · Azure Container Apps · TypeScript · Python</i> - Sole developer of the entire app: Expo mobile client, Next.js web app and FastAPI backend over a 10+ entity PostgreSQL schema that snapshots history, so editing a food never changes past logs. - Designed one provider-agnostic AI layer over Anthropic, OpenAI and Google with per-task model selection, central quota tracking and automatic failover. - Kept the LLM away from the numbers: nutrition values come from USDA FoodData Central, Open Food Facts and Edamam; explanations use RAG over PubMed, Cochrane, WHO and EFSA. - Implemented GDPR consent, data export and deletion, encryption at rest and per-user quotas, following OWASP MASVS.	bionicmeal.com
FinFlow — self-hosted, privacy-first finance tracker on Azure <i>Java 21 · Spring Boot · Azure Functions · Cosmos DB · Redis · Service Bus · Key Vault · Bicep</i> - Designed a serverless backend on Azure Functions with Cosmos DB partitioned per user, so every dashboard query stays in one partition; estimated at ~€0.01 per user per month at 100K users. - Decoupled audit logging and budget alerts through a Service Bus topic, cached aggregates in Redis, and provisioned all seven services as Bicep IaC with secrets in Key Vault.	github.com/ZakariaShahruri/finflow
Data Pipelines — batch and file-triggered processing on Airflow and Azure <i>Python · Apache Airflow · Azure Blob Storage · Docker Compose · PostgreSQL · Parquet</i> - Built two Apache Airflow pipelines that land validated data in Azure Blob Storage: a batch job over the full January 2025 NYC Yellow Taxi dataset (~3.4M rows) and a pipeline triggered by CSV or Excel files dropped into a watched folder. - Split both into reader, validator, processor, back-up validator, writer and reporting stages with per-column validation rules, generating an HTML KPI report from the cleaned data; tests and coverage run in CI.	github.com/ZakariaShahruri/data-pipelines-airflow-azure

AWARDS & CERTIFICATIONS

- 1st Place, HackTheWaste International Hackathon** (Apr 2026). Beat teams from seven countries with Leuven Go, built in 24 hours: a Spring Boot and React service that clusters citizen reports into geospatial hotspots and escalates them to municipal work orders.
- 1st Place, BusITWeek Smart Car Race**, Howest Bruges (Apr 2026). Fastest lap of the event with a browser-controlled RC car: a Raspberry Pi 4 running a Python GPIO daemon behind a Unix socket.
- 2nd Place, UCLL Project Week** (Dec 2024). Sabotage Runners, a 1v1 Pygame racing game with multiple maps and randomly spawning sabotage power-ups, built as a team with no prior game-development experience; chosen by coaches and public vote.
- Microsoft Applied Skills: Get Started with Azure Management Tasks** (Sep 2026).
- Hurricane Electric IPv6 Sage Certification** (Jul 2026).

LEADERSHIP

- Technical Lead, FIRST LEGO League Regional Final**, UCLL (Nov 2025). Co-organised and hosted the regional robotics final for ~100 pupils (ages 9–15) from 9 schools; built and ran an interactive coding game that taught them their first programming concepts, and produced the opening and closing-ceremony videos.

SKILLS

Programming: Java, Python, TypeScript/JavaScript, SQL, C++, Bash
Backend & Frontend: Spring Boot, FastAPI, Node.js, REST, WebSockets, JWT · React, Next.js, React Native, Vue.js, Tailwind
Cloud & DevOps: Azure (Functions, Container Apps, Service Bus, Key Vault), Docker, Bicep, GitHub Actions, OpenShift, Linux
Data & AI: PostgreSQL/pgvector, MongoDB, Cosmos DB, Redis, Apache Airflow, RAG pipelines
Testing & Embedded: JUnit 5, Mockito, Testcontainers, pytest, Vitest · Arduino, ESP32, Raspberry Pi
Languages: English (Fluent, C1 IELTS Academic) · Dutch (Fluent) · Spanish (Native) · Arabic (Conversational)