SAMRAND HASSAN

Technical Manager at Elryan · Researcher

Changsha, China | **samrand96@gmail.com** | **linkedin.com/in/samrand96** | **github.com/samrand96** | **samrand.me**

Technical manager at Elryan with nine years of experience across e-commerce, ERP, university systems and security. I lead Elryan's engineering — first as senior team lead for frontend and middleware — and designed the merchant and marketplace APIs, a real-time bridge between Oracle NetSuite and the vendor platforms, and AI features for search and product content. As a researcher I work on recommender reproducibility, SQL+ML feature computation and Kurdish language technology.

EXPERIENCE

January 2025 – Present

Technical Manager (previously Senior Software Engineering Team Lead) | Manahil El Ryan LTD · Elryan | Remote

- Built and lead the frontend and middleware teams for the Elryan e-commerce platform and marketplace; six projects delivered in parallel.
- Directed the design of the merchant and marketplace APIs and the vendor portal and app, and built the real-time bridge between Oracle NetSuite and the vendor platforms.
- Led search and personalisation from Klevu, Elasticsearch, Constructor and Insider to Wizzy and Google Vertex AI Search and recommendations; designed an open-source search and recommendation platform.
- Designed and trained LLM and image-search features for product content and SEO; built MCP tooling for catalogue enhancement and shopping agents.
- Shipped a one-call cart API and one-page checkout, instalment pricing on listings and in the cart, delivery-date scheduling and order tracking with push notifications, on web and app.
- Set security and data-protection standards across services; contributed to backend work on Magento and NetSuite.

November 2022 – December 2024

Senior Software Engineer | codbel | Remote

- Led secure software development in Java, Spring Boot and Python, with security-focused code review.
- Deployed and hardened services on AWS; automated delivery with Git, Docker and Kubernetes.
- Applied machine learning to anomaly detection and threat prediction.

February 2021 – November 2022

IT Admin Officer (Software Developer) | University of Kurdistan Hewlêr | Erbil

- Built the Dissertation Portal, the Student Information System, store inventory and fixed-asset management, from requirements to deployment.
- Ran the university website, Moodle, email, portals, intranet and ID-card system on RHEL, Ubuntu and Azure.
- Trained staff, wrote documentation and advised on software design and maintenance.

March 2018 – February 2021

Software Engineer, then Senior Software Engineer | Galiawa Group | Erbil

- Built web and mobile applications for every unit of the group, and the group website.
- Led the security configuration of the SAP ERP implementation; penetration testing and vulnerability assessments.
- Built sales BI with Power BI and KoBoToolbox; administered MySQL and MS-SQL; trained junior staff.

December 2019 – July 2020

Senior Software Engineer | Jiasaz LLC for IT Services | Erbil

Designed ERP systems with encryption, access control and secure authentication on PostgreSQL and MongoDB.

February 2017 – January 2018

Software Developer | TEDxNishtiman | Erbil

Built and maintained the website on WordPress and its native Android app with Firebase; SEO and analytics.

January 2017

Software Developer | SunCode Company | Erbil

Web applications, prototypes and native Android apps integrated with client websites and Firebase.

RESEARCH

2026 – Present

Principal investigator, Kurdia | Independent research | Changsha

Dialect-first Kurdish language technology for every variety; benchmark and method papers planned for top-quartile venues.

2025 – 2026

Researcher, recommender reproducibility | Independent research | Changsha

Sole author of a controlled study of dependency upgrades across eleven recommender pipelines, three CPU types and a GPU extension; LHP-GNN for cold-start recommendation.

2024 – 2025

Co-author, SQL+ML performance study | Nankai University | Tianjin

Benchmarked and tuned real-time feature computation in OpenMLDB against SparkSQL, ClickHouse, PostgreSQL and MySQL (IJDMS 2025).

EDUCATION

Master of Science in Software Engineering | Nankai University | Tianjin, China | 2022 – 2024

B.Sc. Software and Informatics Engineering | Salahaddin University–Erbil | Erbil, Kurdistan Region of Iraq | 2014 – 2018

INTERNSHIP

May 2018 – September 2018

Information Security Analyst (Intern) | Asiacell Telecom | Sulaymaniyah

Reported to the cybersecurity chief of staff: tracked security KPIs, prepared executive updates on risk and initiatives, and supported agile delivery of security programmes.

SERVICE AND VOLUNTEERING

May 2017

Organiser (volunteer), SEDAF'17 | Salahaddin University–Erbil | Erbil

Organising team for the Software and Informatics Engineering department's science and technology event.

PUBLICATIONS

1. **Samrand Hassan**, Aras Aram, Ngin Ahmed. Privacy-Aware Compression for Federated Learning: A Comprehensive Survey of Mechanisms, Methods, and Trade-offs. International Journal of Latest Research in Engineering and Technology (IJLRET), 2025. DOI 10.56581/IJLRET.11.12.07-21.

2. **Samrand M. Hassan**. Silent Ranking Changes Under Dependency Upgrades in MovieLens Recommender Pipelines. 2026 (In preparation).

3. Mashkhal A. Sidiq, Aras A. Salih**, Samrand M. Hassan**. Optimization Techniques for SQL+ML Queries: A Performance Analysis of Real-Time Feature Computation in OpenMLDB. International Journal of Database Management Systems (IJDMS), 2025. DOI 10.5121/ijdms.2025.17501.

4. **Samrand Mahmood Hassan**. Image Segmentation Based on Image Histogram and Clustering Technique. 2018.

SKILLS

Architecture & backend:

Node.js (NestJS, Express, Fastify), PHP (Laravel), Python (FastAPI), Java (Spring Boot), Rust; middleware, API design, ERP integration (NetSuite, SAP)

Frontend & mobile:

Vue, Nuxt, Vue Storefront, React, Next.js, Inertia, Astro, Flutter, native Android, Swift

Data, search & AI:

PostgreSQL, MySQL, MongoDB, Redis, Elasticsearch / OpenSearch, Qdrant; LLM features, image search, recommenders, MCP servers, PyTorch, TensorFlow

Infrastructure & security:

Docker, Kubernetes, Jenkins, AWS, Azure, Linux (RHEL, Ubuntu), Plesk, Cloudflare; penetration testing, secure SDLC, data protection

Leadership:

Agile (Scrum, Kanban), mentoring, cross-functional delivery, stakeholder communication, code review

LANGUAGES

Kurdish (Native) | English (C1) | Arabic (C1) | Turkish (B2) | Chinese (A2)

References are available upon request.