



Emad Ehsanrad

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Senior Software Engineer

SUMMARY

Senior Software Engineer with **7+ years** of experience, building **scalable, AI-driven** applications used by **100,000+ users**. Proficient in multiple programming languages and frameworks. Consistently worked in **international environments** with **cross-functional teams** to drive growth through innovative solutions. Committed to continuous learning and adapting to emerging technologies. Active **open-source contributor**.

WORK EXPERIENCE

Senior Software Engineer, troweb

Dubai, UAE

AI powered knowledge management system (KMS) for businesses.

August 2023 - Present

- Built **RAG pipelines** and designed **agentic workflows** to enhance automation and **intelligent decision-making**.
- Engineered scalable microservices using **FastAPI** and **gRPC**, ensuring **high-performance inter-service communication**.
- Designed and implemented an **event-driven** architecture leveraging **Kafka** and **Kubernetes**, reducing latency by 30%.
- Secured **SOC 2 Type 2** certification through strategic collaboration with **Atom Assurances Services** and **Sprinto**.
- Crafted and executed an **onboarding program** that facilitated a **seamless transition** and rapid integration for new engineers.

Senior Software Engineer, edSPIRIT

Dubai, UAE

Cloud-based Open edX solutions, providing hosting, consulting, and customizations.

May 2021 - August 2023

- Led the design and development of a **scalable SaaS platform**, adopted by **200+** academic institutions and universities.
- Supervised seamless migration of infrastructure from **AWS EKS** to in-house clusters, ensuring a **highly available and resilient** environment with **99.99%** uptime.
- Recognized as a **core contributor** in the **Open edX community**, an open-source learning platform used by millions.
- Developed a real-time KPI dashboard using **OpenTelemetry**, **Grafana**, and custom data pipelines, **improving operational visibility by 40%**, and pushing the culture of making **data-driven decisions**.
- Partnered with the sales team in client meetings, **translating complex technical concepts** into actionable solutions, leading to improved customer satisfaction and **faster deal closures**.

Software Engineer, Pubnito

Toronto, Canada

Content-based platforms and services provider.

May 2019 - April 2021

- Implemented **multi-tenancy** support, enhancing **scalability** and reducing operational costs by **30%**.
- Devised a web scraping tool that **automated 100%** of the EPUB creation workflow, saving our content team **3+ months of work** and securing a partnership with the Rice University.
- Integrated **SSO authentication with Keycloak**, boosting security, system efficiency, and enhancing user experience.
- Migrated monolithic applications to a containerized environment using **Docker** and **Kubernetes**, improving deployment efficiency and system reliability.
- Empowered all teams with **workshops**, boosting **skill development** and applying new techniques in daily tasks.

EDUCATION

Kermanshah University of Technology

Kermanshah, Iran

Bachelor of Science in Telecommunication Engineering

September 2012 – May 2016

CERTIFICATES

AWS Cloud Practitioner, Amazon Web Services

February 2025

Neo4j Certified Professional, Neo4j Graph Academy

January 2025

SKILLS

Languages: Python, JavaScript, TypeScript, SQL, GraphQL

Databases: MySQL, PostgreSQL, MongoDB, ClickHouse, Neo4J

Soft Skills: Team work, Problem-solving, Adaptability, Communication

Frameworks: Django, Flask, FastAPI, Next.js

Tools: Kubernetes, Helm, ELK, Docker, GitHub Actions, GitLab CI, Jenkins, Prometheus, Grafana, OpenTelemetry, Kafka, RabbitMQ

LANGUAGES

English: Full professional proficiency (C1)

German: Elementary proficiency (A1)