



# Emad Ehsanrad

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Senior Software Engineer

## SUMMARY

Senior Software Engineer with over **7 years** of experience building **scalable, user-focused** web applications in Agile environments. Skilled in **Python, JavaScript**, and frameworks like **Django** and **FastAPI**, I've **delivered efficient, high-performance** solutions for **100,000+ users**. 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

- Developed **AI-driven** solutions (**RAG pipelines, 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 collaborating with compliance teams to ensure product **quality** and **security**.
- Mentored new engineers through a **custom onboarding program**, accelerating team integration and fostering a culture of **knowledge-sharing**.

### 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)