Mehran Toosi

Principal Software Engineer

Visma e-conomic · Copenhagen

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I design and build storage engines, data systems, AI platforms and on-device models, with 20+ years in software. I co-lead e-conomic's agentic platform and built ecoai, the company's internal AI platform for engineering and business work.



experience

Dec 2025 — now — **Principal Software Engineer** Visma e-conomic

Co-leading e-conomic's agentic platform, the shared foundation product teams use to build and run agents. Built ecoai, the company's internal AI platform in Slack and on the desktop, which colleagues use to investigate systems, change code and analyse data. Mentor engineers and set up shared engineering practices across teams. Reviewed code from 43 colleagues across 23 repositories since 2021.

Aug 2022 — Dec 2025 — **Lead Software Architect** Visma e-conomic

Architecture for decomposing a large .NET and SQL Server monolith: data ownership per module, change data capture, cold storage and product analytics. Mentored engineers and tech leads, and set up engineering practices across teams to improve collaboration and delivery. Ran a four-week experiment on AI coding tools with two teams and wrote the adoption recommendation from its metrics and interviews.

Dec 2020 — Aug 2022 — **Tech Lead** Visma e-conomic

Started the decomposition of e-conomic's monolith. Led the first team to extract a module, customers, and set the patterns for the teams that followed.

Aug 2015 — Dec 2020 — **Senior .NET Developer → Software Architect**

Sitecore · Copenhagen and Kuala Lumpur

The Sitecore Azure Toolkit, then lead developer on Sitecore Cloud Services for the Azure Marketplace, then architecture for distributed systems in product engineering.

2004 — 2015 — **.NET engineering and technical leadership**

Enterprise software, integration platforms and developer tooling, including more than 600 hours teaching C# and .NET to new engineers.

education

MSc and BSc in Computer Software Engineering

selected work

ecoai

Visma e-conomic · 2025–

Visma e-conomic's internal AI platform for Slack and desktop: one agent runtime with engineering and business integrations, document search, code execution and analytics.

mehran.dk/work/ecoai

Privacy Guard

TypeScript, Python · 2026

Reversible pseudonymization between an agent and its model provider: detection in containers, an encrypted vault per conversation, restore at the tool boundary.

mehran.dk/work/privacy-guard GitHub

Orvena platform

Rust, TypeScript · 2026

Agent platform that runs on a single customer's own host: a Rust daemon stores actors, queues and alarms in FeOxDB, with a TypeScript agent layer on top.

mehran.dk/work/orvena

Cue-0.4B

PyTorch, Core ML, Swift · 2026

An open-weights 0.4B model for voice turn-taking in 30 languages: it decides whether speech during an answer means keep going, stop or a new request, and which new turns need no LLM. About 8 ms on the iPhone Neural Engine.

mehran.dk/blog/cue Hugging Face

FeOxDB

Rust · open source · 2025–

Embedded key-value store: a lock-free in-memory index, write-behind persistence through io_uring, reads in about 200 ns. feox-server adds the Redis protocol.

mehran.dk/work/feoxdb GitHub

CW Luma 10

Rust, Swift · 2026

Colour 2D code for screen-to-camera transfer: ten bits per cell, calibration pilots, per-channel registration and Reed–Solomon repair. Rust codec and iPhone scanner.

mehran.dk/work/cw-luma-10 GitHub

writing

Orvena 4B: training a 4B model to do phone tasks without thinking	blog · 6 Nov 2026
Cue: a small on-device model for turn-taking in voice mode	blog · 25 Oct 2026
Running an agent with a 4B model on an iPhone	blog · 16 Oct 2026
Routing an agent with four small models	blog · 13 Oct 2026
Keeping customer data from the model without blinding the agent	blog · 9 Oct 2026
A knowledge graph that lets an agent answer data questions correctly	blog · 7 Oct 2026
CW Luma 10: a denser visual code that stays easy to scan	blog · 2 Oct 2026

side projects

flyBrain · The FlyWire connectome as a spiking model in Rust and Metal, about 2.6× real time on an M3 Max. — flybrain.mehran.dk

MSAP-2 · An 8-bit computer built from 74HC logic, microcoded, with its own monitor OS. — msap2.mehran.dk

MSAP-1 · The breadboard 8-bit computer from 2021, with a cycle-accurate 3D simulator. — msap1.mehran.dk