

# Ami Heines

ami.heines@gmail.com

+972-52-3569713 | amiheines.com



## Summary

Software architect and full-stack developer with 15+ years designing and running production backends for regulated industries. For the past 7 years, backend architect and team lead for **CISOteria**, a security governance & compliance (GRC) SaaS platform, leading a small distributed team across Israel and India. I own systems end to end — API and data-layer architecture, legacy modernization, containerization, and cloud infrastructure. I also consult on cloud & AI-cost engineering (smallestbusiness.com) and build private blockchain infrastructure. Former startup founder (Flixel — MEMS displays, 7 patents), IDF Major (ret.), B.Sc. Mathematics & Physics.

## Key Projects

**CISOteria** — Security Compliance (GRC) SaaS · Backend Architect 2019–present

- Backend architect for a multi-tenant CISO / compliance platform (offered on AWS Marketplace) — owning API design, data model, and overall system architecture
- Node.js / Express microservices alongside a large legacy **PHP** codebase that I incrementally modernized; **MariaDB**, **Redis** (caching & queues), **Docker**
- Integrated NVD / CVE vulnerability data (OpenCVE) into a vulnerability-management dashboard; SSO / SAML, AWS CloudTrail, Terraform-managed infrastructure
- Led a small distributed team — two developers in India, one in-house developer in Israel, and a QA engineer who built the automated test suite under my guidance
- Ran several other client projects in parallel throughout

**Smallest Business** — Cloud & AI-Cost Engineering Consulting 2026–present

- Advise teams on cutting cloud bills and controlling AI / LLM spend without re-architecting the product
- Design request-path cost controls for AI agents — API gateways with per-key / per-run budget breakers, prompt & response caching, model routing — plus cloud reduction (egress, compute commitment, observability)
- Built the supporting tooling in Astro / Node.js: a data-collection research pipeline and a client-side cloud-bill analyzer

**Blockchain Infrastructure** — ChainVault & Verarta · Freelance CTO 2023–present

- Self-hosted private Antelope / BFT networks for tamper-proof record-keeping: real-estate wire-fraud prevention (ChainVault) and art provenance (Verarta)
- Immutable audit trails with no third-party dependencies; smart contracts in C++ / WebAssembly

**Earlier projects:** NFT pack-opening smart contract on EOSIO (EOStarter, 2022); biometric blockchain wallet (2021); enterprise cyber & privacy application (IPV Security, 2019); encrypted-SMS lottery automation, Philippines (2017–2018); automated online lending platform, USA (Lendmart, 2016–2017).

## Professional Experience

- Freelance CTO, Software Architect & Consultant** 2010–present
- Backend and system architecture for SaaS platforms in regulated industries — a 7-year lead engagement on CISOteria (above), with other client projects in parallel
  - Full-stack development, DevOps, and leadership of small distributed teams
  - Self-hosted infrastructure: Docker, nginx, MariaDB / PostgreSQL, Redis, Elasticsearch, monitoring stacks
- Eyron Ltd** — Software Development Team Manager 2006–2010
- Flixel Ltd** — Founder and CEO 1998–2005
- MEMS flat-panel display technology startup; 7 international patents, SPIE conference publication
- Correlate Ltd** — Development Team Manager 1994–1998
- Azimuth Software Ltd** — Developer 1993–1994

## Technical Skills

**Backend & Architecture:** Node.js / Express, PHP (legacy modernization), REST API design, microservices, multi-tenant SaaS, system architecture

**Data & Caching:** MariaDB / MySQL, PostgreSQL, Redis, Elasticsearch

**Infrastructure & DevOps:** Docker, Terraform, AWS, nginx, Linux administration, CI/CD, SSO / SAML, monitoring (Prometheus, Grafana, Loki)

**Frontend:** Angular, React, D3.js

**Quality:** automated test suites, guiding test-automation practice

**Blockchain:** Antelope / EOSIO, BFT consensus, smart contracts (C++ / WebAssembly), private-chain deployment

**Languages:** JavaScript / Node.js, PHP, Python, C++, SQL

## Education

**B.Sc. Mathematics and Physics** — Tel-Aviv University 1991–1994

## Publications & Recognition

- EOSIO StackExchange — ranked #11 globally (above Daniel Larimer, creator of EOS)
- Academic course: “Full Stack Developer” — Jerusalem College of Technology (2015)
- SPIE Conference: Bi-Stable flat-panel display (Proceedings of SPIE Vol. #4712, 2002)
- Solid State Physics Vol. 205: Conductivity of amorphous nickel-silicon films (1997)

## Patents

7 international patents in MEMS display technology (1998–2004)

## Other

- Member of Mensa International
- Commanding Officer, Major (ret.), Israel Defense Forces
- International Skipper — Mediterranean sailing
- Ham radio operator, call sign: 4X5AH (since 1986)