



Yossi Eliaz, PhD

AI Infrastructure · Secure Execution · ML Systems · CI/CD

eliaz123@gmail.com · Tel Aviv, Israel · US permanent resident

Website · GitHub · LinkedIn · Google Scholar

Principal-level engineer and applied scientist building secure AI execution, CI runners, sandboxes, caching, ML systems, and scientific software. Systems experience spans Linux and container security, firmware and DSP, autonomous-driving perception, computational genomics, technical leadership, and teaching.

CORE SKILLS

AI & systems: secure execution, sandboxes, CI runners, caching, distributed systems, agent evals | ML & science: deep learning, computer vision, computational genomics | Engineering: Python, C/C++, Go, Rust, TypeScript, Linux, Docker, AWS, GCP | Leadership: architecture, product, mentoring, teaching

EXPERIENCE

Dec 2025 - Present

Principal Engineer, AI Systems · Incredibuild / islo.dev

AI execution infrastructure spanning forkable Linux sandboxes, CI runners, snapshots, caching, traces, reproducible environments, and build acceleration; public work includes agentic MapReduce, OSS CI experiments, and technical writing on Bazel, GitHub Actions, Rust, and kernel builds.

Mar 2024 - Jan 2026

Research Scientist & Visiting Scientist · Harvard Medical School

Computational biology and scientific pipelines, including ongoing work connecting cancer transcriptomics, genomics, and quantitative computation.

Mar 2025 - Aug 2025

Tech Lead, ML/AI · Matia.io

Led ML and AI work across product and engineering, translating model capabilities into production systems and product decisions.

Dec 2021 - Mar 2024

Deep Learning & Algorithms Researcher · Mobileye

Production perception and road-junction semantics for autonomous driving, with emphasis on reliable global scene understanding and difficult rare cases.

Aug 2020 - Nov 2021

ML & Data Scientist · NRGene

Industrial genomics and machine learning: genome analysis, CRISPR prediction, iterative learning, and cloud infrastructure for gene-editing workflows.

2016 - 2021

Computational Scientist · Baylor College of Medicine & Rice University

Computational genomics, 3D genome architecture, Hi-C, ENCODE-scale pipelines, physical biology, simulations, graph theory, and machine learning.

2010 - 2016

Software, firmware, kernel, and algorithms roles · Twistlock · Broadcom · Marvell · BAE Systems / Rokar

Systems foundations across container security and firmware; at Marvell, Android/Linux-kernel work on PXA mobile platforms used by Samsung devices; at BAE Systems / Rokar, GPS and navigation algorithms in a guidance-systems environment.

EDUCATION & TEACHING

PhD, Physics - University of Houston (2020)

MSc, Computer Science - The Hebrew University of Jerusalem (2015)

MBA - The Hebrew University of Jerusalem (2014)

BSc, Computer Engineering & Physics - The Hebrew University of Jerusalem (2012)

Holon Institute of Technology - Senior Lecturer & course coordinator — Engineering of Advanced Software Solutions (EASS) (2022 - Present)

Open University of Israel - Lecturer (2021 - 2023)

University of Houston & Rice University - Lecturer and mentor (2016 - 2020)

The Hebrew University of Jerusalem - Teaching Assistant (2010 - 2012)

SELECTED WORK & RECOGNITION

- **AI infrastructure** Built secure sandbox, snapshot, caching, and CI-runner systems for AI agents and developer workflows.
- **Open-source impact** A trace-driven parallel-snapshot agent-evaluation harness on islo.dev reached #2 on Hacker News.
- **Applied ML** Shipped autonomous-driving perception systems at Mobileye and received an Executive VP Innovation Award.
- **Research** About 16 peer-reviewed publications across computational genomics and biophysics; h-index 10.
- **Entrepreneurship** Co-founded QuBind Technologies (acquired) and advised deep-technology investors and founders.