Sahar Halili

Full-Stack Software Developer | Security and learning tools | .NET, React, Python

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I write software, mostly for security and for learning. The security part comes from the C4I Corps, where I worked on networks and permissions and still do reserve duty. The learning part comes from teaching math and Python at a high school. I have a B.Sc. in computer science from HIT, I take on freelance projects, and I'm looking for my first full-time job as a software developer, full-stack or backend.

Security projects

HardenGarden | Linux security auditor with a local LLM — site · code

- Desktop app and CLI that runs 12 checks (SSH, firewall, services, permissions, sudo, updates and more) and scores the machine. It never changes the system by itself: each fix is a script the user runs.
- Commands come from an allowlist and run without a shell. The API listens on loopback only, with a new token each launch. A local model (Ollama) explains each finding and cites its sources.
- Releases are signed with Sigstore and ship with an SBOM. The repo runs CodeQL and Trivy and has a STRIDE threat model. Fix scripts are tested in throwaway Docker containers on Ubuntu and Debian.

Python · FastAPI · Ollama · ChromaDB · RAG · Tauri · React · TypeScript · Docker

NetSentinel | Security monitor for home networks — demo · code

- Finds the devices on a network, scans their ports and samples traffic. Alerts on suspicious ports, new devices and traffic spikes reach the dashboard live over WebSocket.
- Every endpoint that changes state needs an API key. Tested with pytest, Vitest and Playwright on iPhone, Android and desktop.

Python · FastAPI · Next.js · TypeScript · PostgreSQL · Redis · nmap · Scapy · Docker

Learning projects

EasyMat | AI math tutor for the Israeli Bagrut — site · code

- RAG over an Obsidian knowledge base in Pinecone, where the sync uploads only the notes that changed. Students can also photograph a handwritten equation and get it solved.
- Answers stream from the Claude API, and prompt caching cuts the model cost by about 90%. 101 Vitest tests cover streaming, refusals, errors and rate limiting in the chat route.

Next.js · TypeScript · Claude API · Pinecone · RAG · KaTeX · Vitest

Linux Master | Linux certification course for phones — demo · code

- 93 short units, about 3,000 exercises and 6 mock exams for 6 certifications: LPIC-1, RHCSA, LFCS, Linux Essentials, SUSE SCA and CompTIA Linux+, in English and Hebrew.
- Answers run in a simulated shell or come from output recorded on real Ubuntu, AlmaLinux and openSUSE machines. In CI, Playwright plays the whole course from start to finish.

JavaScript · PWA · Linux · Bash · Playwright · Docker · GitHub Actions

Systems and AI projects

SalaryNet | Payroll and HR system — demo · code
ASP.NET Core 8 API in Clean Architecture on SQL Server, JWT roles with per-resource authorization against IDOR, Vue 3 and Angular clients. 162 xUnit tests with Testcontainers.

SalSmart | Grocery price comparison — demo · code
Processes about 1.6 million prices per run into PostgreSQL. FastAPI, RabbitMQ alerts, Prometheus and Grafana. CI deploys it to a test Kubernetes cluster.

CodeMate AI | Chat over a codebase — demo · code
Upload a codebase and ask about it. RAG with ChromaDB, and it switches between OpenAI and Claude. FastAPI, React, pytest in CI.

NitaiBot | Telegram bot on the Claude API — code
Turns a product name or SKU into a full Hebrew product page for WordPress, using Claude's web search. Python and Flask.

Experience

Freelance Software Developer — 2026 - Present
Web, custom software and mobile projects, alongside teaching.

Mathematics and Computer Science Teacher | Yeshivat Bnei Akiva Lapid, Modi'in — 2025 - Present
Teach Python and advanced mathematics to high school students, and work out where each student is stuck.

IDF C4I Corps — 2014 - 2017 · Reserves: 2017 - Present
Installed, connected and troubleshot computer systems and networks, and managed user permissions. In reserves, set up and maintain computing and communications infrastructure.

Skills

Languages	C#, TypeScript, JavaScript, Python, SQL, Bash
Full-stack	Backend: .NET 8, ASP.NET Core, EF Core, FastAPI, REST APIs. Frontend: React, Next.js, Vue 3, Angular
Cybersecurity	Linux hardening, JWT and role-based access, nmap, Scapy, CodeQL, Trivy, SBOM, Sigstore, STRIDE
AI	Claude API, OpenAI API, RAG, embeddings, Pinecone, ChromaDB, Ollama, prompt caching, Claude Code
Data, DevOps	SQL Server, PostgreSQL, Redis, RabbitMQ, Docker, Kubernetes, CI/CD with GitHub Actions, Git
Testing	Unit, integration and end-to-end tests: xUnit, pytest, Vitest, Playwright, Testcontainers

Education and languages

B.Sc. in Computer Science | Holon Institute of Technology (HIT) | Hebrew: native | English: very good — 2021 - 2025