TAY SHOFER

SOFTWARE ENGINEER | BACKEND, FULL-STACK & AI SYSTEMS

Israel | +972 52-818-3479 | tayshofer05@gmail.com
GitHub: github.com/taysh123 | Portfolio: tayshofer.dev | LinkedIn: linkedin.com/in/tay-shofer-1b2b54287

PROFESSIONAL SUMMARY

Computer Science graduate who has independently designed, built, tested, and deployed software across a live mobile/web product, .NET backend systems, an AI-assisted security platform, multi-agent LLM workflows, and developer tools. Hands-on with C#/.NET, Python, TypeScript/JavaScript, SQL, REST APIs, PostgreSQL, authentication, concurrency, messaging, automated testing, and Docker/CI. Focuses on reliable system boundaries, secure flows, reproducible tests, and shipping complete features from data model to deployment.

TECHNICAL SKILLS

Languages: C#, Python, TypeScript, JavaScript (ES6+), SQL; additional academic/project experience: C, C++, Java
Backend: .NET 8/10, ASP.NET Core, REST APIs, Entity Framework Core, Clean Architecture, CQRS/MediatR, FluentValidation, Serilog, OOP
Frontend & Mobile: React 19, Next.js 15, React Native/Expo, HTML5, CSS3, Tailwind CSS, Zustand, Radix UI, responsive design, Capacitor
Data & Messaging: PostgreSQL, SQLite, SQLite FTS5, Redis, RabbitMQ/MassTransit, SignalR, schema migrations, offline-first synchronization
AI / LLM: Anthropic API, Ollama, multi-agent orchestration, retrieval grounding, structured JSON outputs, provider abstraction, token-budget controls, deterministic fixture replay
Security: JWT/RS256, refresh-token rotation/revocation, OAuth 2.0/OIDC, Google/Apple sign-in, BCrypt, JWS, HMAC-SHA256, RBAC, rate limiting, MITRE ATT&CK
Testing & Delivery: xUnit, Testcontainers, pytest, unittest, Jest, Vitest, unit/integration testing, Git, GitHub Actions, Docker, Docker Compose, Linux, WSL2, Kali Linux, Bash, PowerShell, npm, Vercel, Railway, PyInstaller
Additional Tools: Phaser 3, Matter.js, Vite, Unity, OpenTK, PostHog, Expo/EAS

SELECTED SOFTWARE PROJECTS

T POKER - Poker Study App & Home-Game Manager | .NET 8, ASP.NET Core, EF Core, PostgreSQL, React Native/Expo, TypeScript, Next.js | Website · Web app · Apple App Store · Google Play

- Built and released the product end to end: REST API, React Native mobile app, and Next.js web app; published the mobile app on the Apple App Store and Google Play.
- Structured the backend into four Clean Architecture layers with CQRS/MediatR, 26 domain entities, and 12 REST controllers backed by PostgreSQL and Entity Framework Core.
- Implemented offline-first session storage using SQLite and deterministic synchronization with deletion tombstones to preserve consistent player balances across reconnecting devices; added a greedy debt-settlement algorithm to reduce group debts to fewer payments.
- Delivered 35 screens across 14 feature modules covering game sessions, player statistics, tournament workflows, and player-to-player settlement.
- Secured account flows with JWT, Google/Apple sign-in, BCrypt, revocable refresh tokens, and rate limiting; implemented server-side verification paths for Apple and Google Play purchases.
- Maintained a five-job GitHub Actions pipeline for backend tests, mobile type checks/Jest, web builds, Expo export, and secret scanning; deployed Dockerized services to Railway with health checks and startup migrations.

AEGIS - AI-Assisted Security Operations Center (SOC) | ASP.NET Core, Next.js 15, React 19, PostgreSQL, Redis, RabbitMQ/MassTransit, SignalR, Docker Compose | GitHub repository

- Designed a modular monolith with eight bounded contexts and an event pipeline from ingestion through detection and threat scoring to alerting, with MITRE ATT&CK mapping, incident workflows, and live SignalR dashboard updates.
- Implemented user and agent security with RS256 JWTs, hashed/rotating refresh tokens, RBAC, optional Google sign-in, HMAC-SHA256 agent authentication, and rate limiting.
- Integrated Redis detector state and RabbitMQ/MassTransit alert delivery; configured the API, frontend, database, cache, and broker for repeatable Docker Compose startup.

AI MARKETING HUB - Multi-Agent Content Generation Backend | .NET 10, EF Core 10, PostgreSQL, Anthropic API, Docker, Testcontainers | *Private repository; access on request*

- Built a hierarchical multi-agent pipeline coordinating research, copywriting, video-script generation, and aggregation into a reviewable content package.
- Prevented concurrent token-budget overspend with reserve-then-reconcile accounting over an append-only ledger, serialized by transaction-scoped PostgreSQL advisory locks acquired in a fixed order.
- Constrained model responses to schema-conformant JSON, handled fenced and prose-wrapped replies, and ensured malformed output fails and retries instead of passing through partially parsed data.
- Added deterministic fixture replay through a request-keyed dry-run provider, enabling end-to-end tests without credentials, network calls, or model spend; wrote 647 tests including real-PostgreSQL integration tests.
- Added compliance checks for unsupported claims and a Telegram human-approval gate backed by a lease-based task queue designed to prevent duplicate task claims.

DEVELOPEROS - Local-First Code Understanding Workspace | Python, SQLite FTS5, Ollama, PyInstaller, GitHub Actions | GitHub · Releases

- Built a local code indexing and retrieval-grounded Q&A tool whose answers cite file paths and line ranges and abstain when the indexed code cannot support a claim.
- Implemented the dashboard, CLI, and standalone Windows desktop experience using the Python standard library for the application runtime, with no third-party runtime dependencies; optional inference runs through mock or local Ollama providers.
- Released v1.0.0 with a Windows executable and installer, backed by 363 automated standard-library tests; the app runs locally without an account, cloud dependency, or required API key.

GRAVITY FLOW - Physics Puzzle Game | Strict TypeScript, Phaser 3, Matter.js, Vite, Vitest, Capacitor | Live web build

- Built a web-deployed physics puzzle game with 150 hand-designed levels across 15 worlds, plus endless and daily modes, progression, achievements, and a cosmetics economy.
- Separated progression, scoring, achievements, and daily-seed logic from the renderer so core gameplay rules can be tested without initializing Phaser.
- Maintains 1,277 automated tests across 61 test files and a live web build; Capacitor-based mobile packaging is in development, not represented as a store release.
- Kept native integrations behind platform checks so the web build remains independent from native-only plugins.

PROFESSIONAL EXPERIENCE

Elementary School Programming Teacher | Go-Pad | 2023-2025

- Independently planned and delivered lessons in programming fundamentals and computational thinking, adapting explanations and exercises to learners with different ability levels.
- Translated abstract technical concepts into clear examples and structured exercises for non-technical learners.

Combat Soldier & Logistics Supervisor | Israel Defense Forces | 2018-2021

- Supervised logistics activity in a high-pressure operational environment, coordinating people, equipment, accountability, and changing priorities under strict time constraints.
- Maintained equipment accountability and supported reliable execution of operational logistics processes.

EDUCATION

B.Sc. in Computer Science - Holon Institute of Technology (HIT) | 2026

Selected grades: Internet Programming Environments (97), Generative AI (95), Computer Networks (90), Database Systems (89), Blockchain (89), Computer Security (80), Operating Systems (80).

Technological Certification - Mechanical Engineering and Computer Systems in Autotech Vehicles | Amal 1 Multidisciplinary High School

Languages: Hebrew (Native) | English (Fluent; professional proficiency)