

Iddo Sadeh

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Software and Product Engineer - AI Systems, Full-Stack Development, Data, and Automation

Profile

Biomedical engineering graduate and software builder with experience spanning AI research infrastructure, full-stack products, data pipelines, client delivery, technical instruction, and hardware-software systems. Comfortable moving from ambiguous requirements to working software, testing it against real behavior, and documenting it for other people to operate.

Professional Engineering and Data Experience

Software Engineer, AI Research Infrastructure

Nov. 2025 - Aug. 2026

Plato - Independent Contract

San Francisco, CA / Remote

- Built and operated containerized web-application environments used to train and evaluate computer-use agents using Python, Docker, SQL, REST APIs, Playwright, and reproducible snapshots.
- Improved autonomous pipelines for application setup, synthetic-data generation, review, coding-agent repair, validation, and clean-state recovery across a catalog of more than 250 simulators.
- Evaluated AI-generated applications against real product behavior, traced failures across agent, browser, application, database, and infrastructure layers, and converted recurring issues into tooling, tests, and documentation.
- Contributed Python CLI and configuration fixes for environment creation, data-generation, schema-aware database setup, review, and manual recovery through Git-based pull requests and code review.
- Wrote reproducible defect reports and explicit coverage plans for generated applications, grouping recurring failures by root cause so the team could improve shared generators rather than repeatedly patching individual outputs.

Data Analyst, Consultant

Oct. 2023 - Dec. 2023

BC College of Nurses and Midwives - Consulting Contract

Vancouver, BC

- Built an R pipeline that standardized, validated, and reported on thousands of regulated candidate records, replacing manual processing with a repeatable quality-controlled workflow.
- Created standardized Excel intake templates, data-cleaning checks, and R Markdown reporting outputs, then documented the workflow for handoff to internal users.

Open Source Learning Facilities Project Assistant

May 2022 - Apr. 2023

University of British Columbia - Part-Time Student Employment

Vancouver, BC

- Developed Python and Plotly Dash learning applications, migrated R and MATLAB workflows, and documented open-source course tools supporting 1,500+ students annually.
- Worked through Git-based review with faculty and contributors, debugging scientific-computing examples and improving the maintainability of reusable course material.

Teaching Experience

Programming, Mathematics, and Physics Instructor

June 2021 - Present

Independent and Yes Education - Part-Time

Vancouver, BC

- Taught more than 100 students in Python, Java, C++, web development, AP Computer Science, AP Calculus, AP Physics, and AMC/CAP competition preparation.
- Developed AP Computer Science and C++ curricula and adapted explanations and assignments for learners aged 12 to 30 in one-on-one and small-group settings.

Technical Skills

- **Software:** Python, JavaScript/TypeScript, React, Next.js, Node.js, PHP, WordPress, C++, R, SQL, HTML/CSS, REST APIs
- **AI and data:** agent evaluation, RL environments, coding-agent workflows, OpenAI APIs, PostgreSQL, MySQL, pandas, NumPy, ETL, Plotly Dash
- **Systems and delivery:** Docker, Linux/Bash, Git/GitHub, Playwright, AWS, Cloudflare, DigitalOcean, CI/CD, automated testing, technical documentation
- **Graphics and hardware:** Three.js, WebGL, GLTF, ESP32, IMU sensors, embedded C++, signal processing, SolidWorks

Education

Bachelor of Applied Science in Biomedical Engineering

Sept. 2021 - Apr. 2025

University of British Columbia - Bioinformatics specialization

Vancouver, BC

Coursework included machine learning, algorithms and data structures, databases, statistics, computational biology, signal processing, embedded systems, and software design.

Client and Product Work

Inbound Acquisition and AI Automation Consulting <i>Wealth Preservation Management - Part-Time Client Engagement</i>	Oct. 2026 - Present Vancouver, BC
- Retained to develop an AI-enabled inbound acquisition system spanning Google Ads, keyword and search-intent research, landing pages, SEO, conversion-rate optimization, and practical automation. - Responsible for connecting campaign activity to booked meetings, qualified prospects, and funded clients so decisions can be based on business outcomes rather than clicks or form fills.	
Lexifour <i>Independent vocabulary-learning product</i>	2026 - Present Live product
- Built and launched a React and TypeScript product with daily challenges, accounts, leaderboards, subscriptions, and spaced-repetition practice on Cloudflare Workers and D1. - Developed a Python question-curation pipeline with lexical data, semantic similarity, automated checks, versioned artifacts, source attribution, and human review. - Implemented server-side game sessions, answer events, player progress, subscription entitlements, and editorial tools used to create and review question sets. - Added unit and browser-flow tests for gameplay and editorial workflows while maintaining a live public web release and preparing mobile clients.	
Cohen Insurance Web Platform <i>Commissioned Hebrew RTL WordPress platform</i>	July - Aug. 2026 Private repository
- Implemented 13 public routes from 24 Figma screens using a custom block theme, PHP plugin, dynamic articles, and ten independently configured lead forms. - Automated local provisioning, content seeding, route and form verification, browser testing, responsive-image checks, and versioned deployment packaging. - Separated presentation from durable business behavior so theme updates would not overwrite client-managed content, form configuration, credentials, or production data. - Added Hebrew validation, responsive WebP delivery, reduced-motion behavior, keyboard checks, no-JavaScript fallbacks, and visual audits across desktop and mobile layouts.	
m.2 Interactive Product Experience <i>Commissioned creative-technology project</i>	2026 Live Code
- Served as sole implementation engineer for a five-page experience with Three.js/GLTF visualization, 360-degree product interaction, scroll-driven motion, synchronized media, responsive layouts, and designer-facing tuning tools. - Built an interactive physiological-data interface with timelines, charts, environmental metrics, memory previews, and accessible controls for recorded experiences. - Translated detailed Figma direction and Blender assets into production HTML, CSS, and JavaScript through a rapid designer-feedback cycle.	
Pixelf Museum Installation <i>Commissioned installation for the Israel Museum</i>	2026 Live
- Built a Python service that publishes new TouchDesigner artwork to DigitalOcean Spaces with a stable QR destination, cache control, logging, and documented unattended recovery. - Integrated filesystem monitoring, S3-compatible uploads, browser cache-busting, and a mobile-first visitor interface with view, download, and artist-discovery actions.	
Times Language Animated Poster <i>Commissioned browser-based animation</i>	2026 Portfolio
Implemented an 11-phase p5.js animation system with dot growth, transformations, and emergent behavior from a designer's visual direction.	
INTK72 Interactive Pattern Concept <i>Commissioned iPad-first web prototype</i>	2025 Portfolio
Implemented a questionnaire-driven interface that transforms user responses into a personalized visual pattern for design exploration.	
AI-Powered 3D Typography Generator (TypoScop) <i>Commissioned creative-technology project</i>	2024 Code
- Built a Node.js and Three.js application that uses OpenAI function calling to convert natural-language direction into interactive real-time typography visualizations. - Designed structured tool calls that let the model change scene parameters while keeping rendering behavior deterministic and immediately visible in the browser.	

Tetris Hebrew Typography	2024
<i>Commissioned generative-typography project</i>	Code
- Developed custom font rasterization that converts Hebrew TTF/OTF glyphs into block-based forms rendered as an interactive Three.js composition. - Implemented controls for typography, animation, and composition as an experimental bridge between generative design and browser-based graphics.	
AP Computer Science A Textbook	2024
<i>Independent educational product</i>	Live
Authored and published a structured Java curriculum for AP Computer Science A, combining explanations, examples, exercises, and material used in ongoing instruction.	
Windows 95 Interactive Portfolio	2024
<i>Commissioned creative web project</i>	Portfolio
Built a browser-based portfolio around a Windows 95 visual system, translating a designer's concept into reusable windows, navigation, and responsive interactions.	
Academic Engineering Projects	
Smart Swimming Performance Analyzer	2025
<i>UBC capstone with FORM Swim</i>	Code
- Built an ESP32/IMU wearable, C++ firmware, and Python signal-processing workflow with ML-based stroke detection to reduce manual video analysis. - Developed data acquisition, processing, visualization, and validation workflows in collaboration with FORM Swim, then presented the results to technical and non-technical stakeholders.	
When2Meet Interface Redesign	2025
<i>UBC CPEN 441 course project</i>	Portfolio
Prototyped and implemented a responsive redesign of the scheduling interface, focusing on clearer availability input, visual hierarchy, and mobile interaction.	
Medical Treatment Adherence System	2023
<i>UBC biomedical engineering project</i>	Code
- Designed circuitry and component communication, built a cloud-backed patient database, generated test data, and developed a Plotly Dash clinician dashboard for an ESP32-enabled adherence-monitoring prototype. - Connected the wearable concept, Bluetooth-enabled patient workflow, React interface, Google Cloud storage, and clinician-facing analytics into an end-to-end system design.	
Anti-Covid Proximity Belt	2021
<i>Langara College sensor prototype</i>	Arduino, ultrasonic and PIR sensors
Built a wearable prototype that combined ultrasonic and PIR sensors to detect breaches of a configurable personal-space boundary and trigger an alert.	