DAVID LOWENFELS

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CAREER OVERVIEW

People- and product-oriented engineer with 20 years experience across web, mobile, and embedded systems. Deep expertise in Ruby on Rails, from Silicon Valley's Web 2.0 era to modern SaaS and AI-enabled products. Skilled in full-stack development, system architecture, and mentoring juniors. Known for pragmatic problem-solving, collaborative leadership, and delivering reliable, maintainable software. US Citizen with full right-to-work in UK by marriage.

TECHNICAL SKILLS

Expert: Ruby, Rails, Hotwire / Stimulus, Heroku, PostgreSQL, Redis, Sidekiq / GoodJob, Minitest, TDD, Agile / Scrum, OOP, Tailwind CSS, CI/CD, Git, GitHub Actions, Matlab.

Proficient: JavaScript (ES6+), Java, C/C++, Python, RSpec, Cucumber, Webhooks, Payment Gateways, AWS S3, Docker, x86 Assembly, Lisp, Linux Shell, SOLID, diffusers, ComfyUI.

Familiar: TypeScript, Node.js, React, Swift, OAuth, JWT, DRM, Playwright, AWS EC2 & Lambda

PROFESSIONAL EXPERIENCE

Freelance Consulting @ Lowen Labs

- Sr. Rails Dev @ Mirror-Astrology.com   2025 (Q2-Q4)
  - Designed and implemented modular AI workflows for custom astrological reports. Integrated Stripe billing API. Built a robust geocoding wrapper. Overhauled astronomical calculations with a custom ruby gem that wraps the SwissEphemeris API.

- Sr. Rails Dev @ *Homey.co.uk, London, UK (Remote)*   2025 (Q1-Q2)
  - Delivered crucial product features and **resolved urgent bugs** working alongside senior developers, designers, and QA specialists.
  - **Strengthened security infrastructure** with IP geofencing and logging; built custom document template editor; established JSON validation for webhook control panels
  - Enhanced developer experience to **enhance team productivity,** and foster a more **collaborative culture.**
       Rails, JS (Hotwire/Stimulus, Trix), Tailwind CSS, Sidekiq, REST APIs, Heroku

- Sr. Rails Dev / AI Consultant @ *No Logo Media, Edinburgh, UK*   2023 – 2025
  - Led grant-funded AI initiative to develop a custom data pipeline (scraping and tagging) for customer-facing chatbots, from proof-of-concept to production in 3 months.
  - Spearheaded refactoring of legacy codebase to enhance modularity and maintainability, **boosting test coverage by 300%.**
  - Mentored the product team on agile methodologies, user stories, and automated testing.
  - Minimized deployment risks and **improved production uptime by 20%**, by implementing a CI/CD pipeline and staging server.
       Rails, JS, Tailwind CSS, GoodJob, Web Scraping, API Integration, Heroku, LLMs

- Lead Architect (HW/SW) @ *MindSpa, San Rafael, CA*   2022 – 2023
  - Designed and prototyped an **embedded system** for light/sound brainwave entrainment.
  - Developed a custom interpreter and multi-channel sequencer to play back 12 user programs stored on EEPROM.

C++, Realtime DSP, Arduino, Hardware Design, RGB LEDs

Solo Founder / CTO @ *Pranawave, San Francisco, CA*   2017 – 2019
- Created healthtech products for **HRV biofeedback** (desktop USB sensor & iOS app).
- Developed **proprietary algorithms** for real-time biosignal acquisition (camera-based PPG).
  Ruby, Swift, Java, C++, DSP, HRV, Mobile App

Co-Founder @ Internaut Design, *San Francisco, CA*

Co-Founder / CTO @ *ScrumNinja*   2008 – 2013
- Ideated and bootstrapped Internaut's internal tool into a profitable **SaaS product**.
- Built a complex drag-and-drop UI with **Scrum/Kanban card wall** features.
- Led customer support, UX testing, and product development.
- Deployed and maintained a REST API for webhook integrations and customer tooling.
- Implemented **production caching and performance tuning** with Redis and Heroku.
  Rails, JS (jQuery), Caching, Product Development, CI/CD, Payment Gateways

Team Lead/Manager, Principal Developer/Mentor   2006 - 2016
- Led development of MVPs for startups during Silicon Valley's **Web 2.0** era (Rails 1.0!), bridging product strategy, engineering, and user experience.
- Managed a cross-functional team of four developers as **Scrum Master / Project Manager**.
- Mentored engineers and stakeholders; hosted and presented at the SF Ruby Meetup, maintained a tech blog, and championed Rails and adoption of **Agile/XP/TDD**.

Selected Clients:
- **LinkedIn**: Partnered with in-house engineers to launch a social events platform feature adopted by millions of users. Integrated Rails with OAuth and OpenSocial Javascript API.
- **Navera**: Architected an extensible DSL integrating multiple employee-benefit APIs, enabling a modular, cloud-based decision-support platform; contributing to successful acquisition.
- **Pioneer Electronics**: MVP for SyncTV, a browser-based TV app with DRM (forerunner of Apple TV).
- **Monster.com**, Trekaroo, SumZero, StartupAgents, PhotoVoo, Three Stone Hearth.

Independent Software Developer, *San Francisco, CA*   2003 – 2006

Projects included: an e-commerce website for luxury handbags (PHP, PayPal API), TimewARP 2600 VST synthesizer (C++, audio DSP, VST), datalogging system for greentech hardware (embedded USB driver), contractor at [MP34u.com](MP34u.com) (LAMP stack)

EDUCATION
- **Massachusetts Institute of Technology (MIT)**
  - *B.Sc.*   Electrical Engineering & Computer Science
  - *M.Eng.*   Electrical Engineering (DSP)
- **Stanford University**   *- M.A.*   Music, Science & Technology (Audio DSP, HCI)

MENTORSHIP & TEACHING
- **Engineering Mentor**   *Internaut Design*   2007–2014
  Guided junior developers in best practices, code quality, and career development
- **Coach / Mentor**   *Dev BootCamp SF*   2013–2014
  Supported career transition students in an intensive coding program.
- **Guest Lecturer**   *Stanford University*   2005–2007
  Intro to Ruby (IT Dept.)**,** Intro to PureData externs in C++ (Music 250).