

# DAVID LOWENFELS

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## CAREER OVERVIEW

Product-focused software 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 engineers. Known for pragmatic problem-solving, collaborative leadership, and delivering reliable, maintainable software. US citizen with full right-to-work in the UK.

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## 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, Docker, x86 Assembly, Lisp, Linux Shell, SOLID, diffusers, ComfyUI.

**Exposure:** Node.js, React, Swift, OAuth, JWT, DRM, Playwright.

**Curious:** Go, Rust, Elixir, Kotlin.

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## PROFESSIONAL EXPERIENCE

### Freelance Consulting @ Lowen Labs

- 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 Scrum process and development infrastructure 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](http://MP34u.com) (LAMP stack)

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## 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)

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## 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).