# Profile

Pragmatic fixer, trouble-shooter, and engineering leader with over 25 years of experience solving technical challenges across internet, cloud, and software sectors. Track record of untangling complex problems and delivering solutions that unlock business growth. Progressive journey from hands-on developer to strategic technical leadership, maintaining strong engineering roots while building high-performing teams.

# **Impact Areas & Key Achievements**

## **Technical Problem Solving**

Built the core publishing engine at Wonderbly that enabled scaling from startup to millions of personalized books. Designed and implemented the Scala-based typesetting system and OpenGL renderer, removing critical production bottlenecks while meeting strict print quality requirements.

At Platform.sh, developed fixed-overhead solutions for content delivery and database management that significantly improved cloud service reliability and usablility.

## **Innovation & Architecture**

Created IMDb's message board system from concept through implementation, creating one of the early Internet's large-scale community platforms. Built custom rendering engines for digital publishing, including a virtualized graphics pipeline for cloud GPU deployment without GPU hardware.

Designed and built real-time, event driven streaming protocol for Rails at Wrangler.io to enable highly concurrent and asynchronous interactive use. Consistently identifies technical approaches that unlock new capabilities and remove blockers.

## **Infrastructure & Systems**

Led Last.fm's database infrastructure during rapid growth, handling millions of daily music streams and user interactions. Redesigned the authentication system after a security incident, maintaining service continuity throughout the transition.

At Platform.sh, evolved the cloud orchestration system to support enterprise-scale operations, focusing on performance optimization and reliability. At IMDb pushed web application and database servers to the limits of scalability during hyper growth.

## Leadership & Team Development

Guided Platform.sh's engineering organization through significant growth, establishing new divisions for tooling and engineering excellence. Focus on developing teams that combine technical depth with practical problem-solving skills, with a culture of ownership, collaboration, and support.

Have led development and operations squad-sized delivery teams of 3-8 members, including multiple concurrent teams Have acted as line manager, mentor and coach for engineers, managers, and engineering leads.

# **Technical Skills**

### **Focus Areas**

Systems Architecture & Performance Optimization Cloud Infrastructure & Deployment Systems Database Scaling & Management Graphics Rendering & Digital Typography Team Development & Technical Leadership CI & Tooling Platform building & Service Architecture Production monitoring & measuring

## **Core Technologies**

Languages: Go, Scala, Python, Java, C/C++, Ruby, Common Lisp, Perl Infrastructure: Cloud Platforms, LXD, Kubernetes, Docker, Linux/UNIX Databases: PostgreSQL specialization, KV stores, Redis cache Web Technologies: JavaScript, Typescript, HTTP front-edge, Rails, Django, Varnish, Apache, nginx, mod\_perl Graphics: OpenGL, PDF Generation, TrueType

## Experience

#### **Finxone Ltd**

2024- – Principal Engineer

Working on everything, but primarily infra/ build/ deployments in the operations team of a novel fintech platform startup. Delivered production deployment tool to automate idempotent live app deployments in seconds. Delivered build pipelines for custom service containers. Built automatic discovery for monitoring endpoints on custom services.

**Stack:** Azure Kubernetes helm go Postgresql TypeScript node docker

#### Platform.sh

2023-2024 - VP Tooling & Imaging

Created new division for support engineering with a focus on tools build automation and containers. Delivered automatic changelog reporting, and protocols for managing and communicating urgent system updates. Owned internal gitlab. 2022- 2023 – VP Engineering Excellence

Running new engineering division focused on engineering craft, quality, culture, practice. Ran weekly engineering all hands (including composing and recording the theme music), management and leadership coaching. Designed first career ladder/matrix for engineers.

2021-2022 - Director Ops & Eng. EMEA

Running a regional core engineering zones, line manager for engineers, including managers and leads. This role included operations engineers as well as software developers. 2020-2022 – Director of Engineering, core

First specialist engineering manager role in the organisation, as we scaled up engineering. 1:1s, goal setting, and performance management, alongside personal developer mentoring and coaching. Continued to contribute to development of core software components, including platform auth service, and the next iteration of the HA container environment.

2018-2020 - Cloud Engineer, core team

Feature developer on cloud orchestration system. Built performant, fixed-overhead content decoding for front edge WAF. Designed & built fixed-overhead upgrades for our managed Postgresql service.

Stack: Go Python Java Postgresql LXC linux lisp

#### Synthace Ltd.

2018 - Senior Software Engineer

Worked on UI features for antha lab automation in-browser IDE, custom query engine for data on the back-end, and data export and parsing from biotech automation robots over serial lines..

Mentoring junior team members

Stack: Go Docker Kubernetes Redux Polymer.js Chrome Windows linux Python antha

#### Wonderbly.com (lostmyname ltd.)

2016-2017 — Principal Engineer Built compositing pre-press and web renderer for personalised books and other products using Java2D and Scala and integrated it into go-based micro-services platform. Designed and an OpenGL "nano-renderer" enabling simplified GL pipelines to run in the cloud without redress to GPU hardware. Delivered both services to meet challenging fixed publication deadlines, considerably cheaper and smaller than the previous generation tech. Coaching and mentoring other developers. Stack: Go Scala Java PDF C++ OpenFrameworks TrueType

#### Makeshift.io/Wrangler.io

2014-2015 — Tech lead

Technology lead for startup, software and infrastructure. Built a novel concurrent asynch query engine as Rails middleware, a client/server protocol and a Heroku plugin. Ran the tech team. **Stack:** Heroku Ruby Rails JavaScript ansible C go Postgresql lisp vagrant

#### Last.fm

2010-2013 - Database architect

Main databases and scaling infrastructure in at Last.fm, the awesome scrobbling social music streaming site. Ops lead for databases. Lead team to redesign authentication back-end after legacy system suffered a password breach. Migrated database replication systems to a new architecture. Migrated HTTP front edge to varnish cache. Developed parallel data load mechanism for bulk catalogue updates.

Stack: Postgresql Varnish C linux memcached PHP

#### Logical Bee

2007-2010 — Director of everything Logical Bee was my own tech company building audio recording software for Mac platforms. Stack: OS X MIDI CoreAudio/AU Objective-C lisp

#### Future Publishing Ltd.

2007-2010 - consultant developer

Worked on the in-house publishing and asset management systems. Bespoke desktop layout application and large binary object management. Invented http proxy to dynamically inject legacy Apple desktop file type information into raw assets on download.

Stack: Java perl Solaris/Oracle C PHP linux

#### Amazon.com

2002-2006 - SDE

IMDb team. I invented and ran the IMDb message boards, the key driver of user registrations to imdb.com over a period of huge growth. Part of the team that launched IMDb Pro.Also other parts of core web platform such as search. DBA. Stack: apache mod\_perl C Postgresql Unix linux

#### Sift plc.

1999-2001 - Developer

Startup, web platform. Ported RDBMS to Postgresql. Wrote cache-warming DNS resolver. Redesigned persistence layer for in-house CMS. Designed and built community comment system. Built email-managed micro-site management system. Built document publishing system that delivered annual ACCA accountancy exam results online to thousands of simultaneous remote candidates.

Stack: perl, mod\_perl, Postgresql, PHP, linux

#### ADSW plc.

1997-1999 — Applications Developer MIS/Data for windows desktops, client/server. Stack: Windows Oracle Gupta C Java linux

#### Mountfield Software Ltd

1995-1997 — Analyst Programmer corporate desktop data entry/ analytics software. Stack: Windows Unix C Gupta informix oracle