Raf Gemmail

Lean-Engineering Leader
Dev no. 4 at Booking.com and Ex-BBC iPlayer
/ Morgan Stanley / ING / Stuff.co.nz

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- 📍 North Auckland, NZ
- 🌐 British and New Zealand Citizen

Summary

I am a transformational technology leader **driving innovation, product growth, and business impact.** For over a decade, I have led the development and product evolution of high-profile and webscale products; scaling systems, optimising cost/performance, and achieving significant revenue increases.

With strong expertise in cloud-native architecture, DevOps, Data, AI/ML and software development, I lead platform and stream-aligned teams to excel using rapid learning loops, experimentation, and FinOps principles.

See Me Here

A sample of public content from community contributions and my InfoQ passion-work:

- Annual InfoQ Culture and Methods Podcasts: 2022, 2023 and 2024.
- On growing junior developers - NZ JS
- On coaching ensemble/mob/pair programming - NZ JS
- On addressing technical debt at the BBC - QCon, London
- Delivered a Containerisation Workshop for Dunedin Techweek
- Organised a remote conference to support folks during early lockdowns
- Helped organise New Zealand's DevOps days

Recent Leadership

Director of Engineering (Platform Capabilities)
Marigold (Formerly CM Group/Campaign Monitor)

July 2024 - *present*
📍 Fully Remote with direct reports across 5 TZs

- **Responsibility and Accomplishments:**
    - Promoted to Director of Engineering, I oversee and lead the leaders who are custodians for our critical engineering platforms, including UI, Mobile Push, Data Engineering, and Platform Engineering.
    - I apply intentionality to create a high-performance culture that drives innovation, while also ensuring maintainability, reliability and security needs, and alignment with business priorities.
    - I am driven by creating a context of autonomy, mastery, and purpose for indirect reports to excel in delivering billions of marketing campaigns across multiple channels, whilst exposing deep insights from petabytes of data.
    - I have prioritized improving remote cohesion and processes to create a reliable, high-trust, and cohesive environment for distributed teams.
- **Senior Leadership Influence:**
    - Contributed in on-site global strategy sessions with other directors from engineering and product.
    - Direct and indirect hiring of onshore and off-shore/oursourced engineers, and establishing a high bar.
    - Growing leaders by introducing mentoring circles where I guide new managers grown from within.
    - Driving leadership initiatives and making use of our data lake for data-driven direction of my teams.
    - I previously introduced a hybrid between ShapeUp and Big Room Planning to combine perspectives from different technical and non-technical stakeholders, while factoring in waste, risk, and technical debt.
    - I have led by example through setting up Product Value Teams in my engineering teams for similar purposes, as well as establishing a waste capture process in Slack to highlight areas of friction.
    - These processes encourage balanced prioritization that factors in the ROI of strategic work, risk management, and non-functionals (security and performance) to unlock or protect future product initiatives.
    - I am also a champion for building a rich engineering culture by running and sponsoring the foundation of several engineering guilds, as well as collaborating with partners in Europe on a global hackathon

event across our organization.

Engineering Manager (Mobile Messaging and Platform/SRE Teams)
Marigold (Formerly CM Group/Campaign Monitor)

July 2022 - present

📍 **Fully Remote with direct reports across 5 TZs**

- **Responsibility and Accomplishments:**
  - Ensuring high availability, cost management and the **delivery of billions of email, push and in-app messages per month** for world leading brands.
  - Leading and managing 2 Platform teams with cross-functional, polyglot, ICs delivering platform and mobile messaging capabilities for a range of customer facing features, with a focus on DevEx.
  - Delivered business sensitive initiatives to time and budget, by focusing on outcomes and project management.
  - Participating in PagerDuty schedule with my teams; supporting ECS/EKS/Kafka/AMQ/Rails/Elixir/Java services. Contributing to and driving architecture convos.
  - Mentoring the next generation of leaders.
- **Senior Leadership Influence:**
  - Coached peers in data-driven leadership and DevEx, leveraging metrics covering cost, delivery, reliability and friction to inform decisions and propel product success.
  - Proactively drove alignment with product, engineering, design and ICs by designing and facilitating remote Big Room Planning sessions with elements of ShapeUp.

Head of Technology promoted from Head of Product - (Fully Remote)
Developers Institute

November 2020 - July 2022

📍 **Fully Remote**

- **Responsibility and Accomplishments:**
  - Led the evolution and design of a remote educational product, collaborating with compliance and marketing leads on growing from single digit to hundreds of full-time learners. Worked with a large NZ firm to design and kick off a workplace accredited programme, exceeding my learner hiring goals.
  - Recruited and grew a team of high-caliber tech leads from industry, to shape learners into the people we'd want to hire ourselves.
  - Promoted with a range of CTO responsibilities, and a period of dual-responsibility, focused on driving the business' scale-up across *all* technology from core product development to enterprise IT.
  - Architected and ran a project to deliver a cloud-native data-driven SaaS using security by design, and targeting the learner experience. Delivered to my own gantt, budgeted and costed, factored in experimentation, focus-groups, and built a new dev team. Hands on Python/AWS.
- **Senior Leadership Influence:**
  - Strategic partnership with CEO and other heads + monthly reporting for CEOs board updates. Hands on dev, teaching and customer engagement.
  - Surfaced waste using value stream mapping, targeting solutions to counterbalancing weeks of admin and a high cost of human error.
  - Assumed responsibility for our technology supplier selection, and the org-wide support function using borrowed FTE capacity.

Leadership Roles

Senior Technical Consultant (DevOps)
Assurity Consulting

February 2020 - November 2020 (COVID)

📍 **Remote/Wellington, NZ**

Consulted and taught DevOps practices and culture. Provided DevOps and BDD consulting at NZQA on a major initiative to automate processing of qualifications. Coached ATDD and paired with BAs on writing BDD requirements. I led developers in self-validating these using Concordion, and driving the development of an AWS serverless Spring Cloud Functions solution.

Contract: Agile and DevOps Coach
NZTA

November 2019 - February 2020

📍 **Wellington, NZ**

Coaching DevOps and led practices in an Azure/ADO government department whilst working with teams delivering massively overrun high-profile projects. Partnered with leadership to coach cultural change and coach in

Agile processes. Addressed trust issues with vendor teams and worked with a myriad of _human_ factors slowing down strong technical teams.

Agile and Technical Consultant
MPorium

November 2018 - January 2019
📍 **London, UK**

Provided experience at a time of CTO absence. Coached, facilitated and cut code on an ML stack for ad bidding based on a range of signals with huge customers. Aided in off-shore dev cohesion, CTO hiring, team reboot. Drove customer satisfaction and team productivity using Agile methodologies. Demystified ML and Spark through mob-programming sessions.

Technical Design Lead
Bank of New Zealand

January 2018 - June 2018
📍 **Wellington, NZ**

Started teams on the strangling of a JEE monolith to microservices in Redshift. Coached customer and business empathy through DDD workshops and event storming. Security championed and drove modernisation of Mobile app development CI. Left due to life-event in the UK.

Technical Coach and Lead (NZ's largest domestic news site)
Stuff.co.nz, Fairfax Media

May 2015 - January 2018
📍 **Wellington, NZ**

Drove a range of high profile projects across multiple languages using lean methods and pioneering in microservices, continuous delivery and experimentation. Coached using mob-programming techniques and empowered my devs. Hands on development across Java and node deployed ECS and Serverless solutions with my early adopting teams! Worked closely and championed Lean methods as part of the senior leadership team.

Solutions Architect & Iteration Master
Catalyst IT

October 2013 - May 2015
📍 **Wellington, NZ**

Designed, built and led high profile solutions and integrations with a BDD focus. Direct collab with Spotify's Partner API team. Stepped into leadership role as the Agile lead on a massive government project using security by design, leading and facilitating a team of 40 ICs, BAs and testers across multiple sites. Worked directly with the Cabinet Secretary of New Zealand, who was the product owner.

Engineering IC Roles

Remote Computer Science Professor (by contract)
OpenClassrooms

2019 - 2022
📍 **Fully remote, NZ & Paris, Fr**

Created technically deep undergraduate classes ranging from ATDD and debugging techniques, through to modern Java Concurrency. Consulted on Software Architecture and Cyber Security programmes.

Senior Software Engineer (Returned to the BBC on a targeted Contract)
BBC iPlayer

April 2013 - October 2013
📍 **London, UK**

Rapid delivery for the BBC of a business-critical Java microservices with hard deadlines. Reverse engineered and migrated a legacy set of Perl microservices to Spring & Camel in AWS, using BDD.

Contract Senior Software Engineer
Headforwards / NTT

January 2012 - April 2013
📍 **Cornwall, UK**

Architected and delivered subsystems for NTT's enterprise cloud solution, leading the way in TDD.

Contract Senior Software Engineer
BBC iPlayer

October 2010 - January 2012
📍 **London, UK**

My highest performing team! I led performance optimisations of one of the UK's most-hit services, forming part of iPlayer. Visualised platform metrics and built versioned REST APIs for serving high-performance programme data. Paired on talk with Katherine Kirk at QCon 2012 on this team's agile journey.

Contract Senior Software Engineer
Trinity Mirror Digital Recruitment (Daily Mirror's Job Board)

July 2009 - October 2010
📍 **London, UK**

Helped architect and scale a major job board. Performance optimisation of search and lucene indexes. Began rewrite using Spring.

Software Engineer
Morgan Stanley

August 2007 - July 2009
📍 **London, UK**

High-performance ETL services to consume and publish market reference and timeseries data.

Software Engineer
VisionOSS

November 2006 - August 2007
📍 **Green Park, Berkshire, UK**

High and low-level Cisco VoIP software and hardware integration.

Senior Asset Control Developer
Abbey Financial Markets (Santander)
February 2005 - November 2006
London, UK

High performance message orientated middleware to support traders.

Experienced Software Engineer
ING Bank
February 2003 - February 2005
Amsterdam, NL

Implemented high-performance data-intensive applications and middleware for front office traders and internal consumers.

Senior Software Engineer
Booking.com
February 2002 - February 2003
Amsterdam, NL

Developer number 4 and the first commit. Refactored original code to be more OO and normalised Database.

Software Engineer and Systems Administrator
Codix.net
January 2001 - February 2002
London, UK

Worked as both a SysAdmin and Software Engineer, building and maintaining brand-name sites on bespoke projects.

Junior Software Engineer
Sportingbet.com
February 2000 - January 2001
London, UK

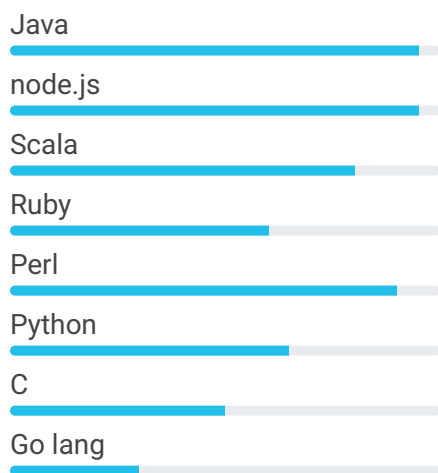Cutting my teeth in the commercial world building statistical interactive TV and web applications.

Professional Skills & Tools

Product and Engineering Leadership Skills

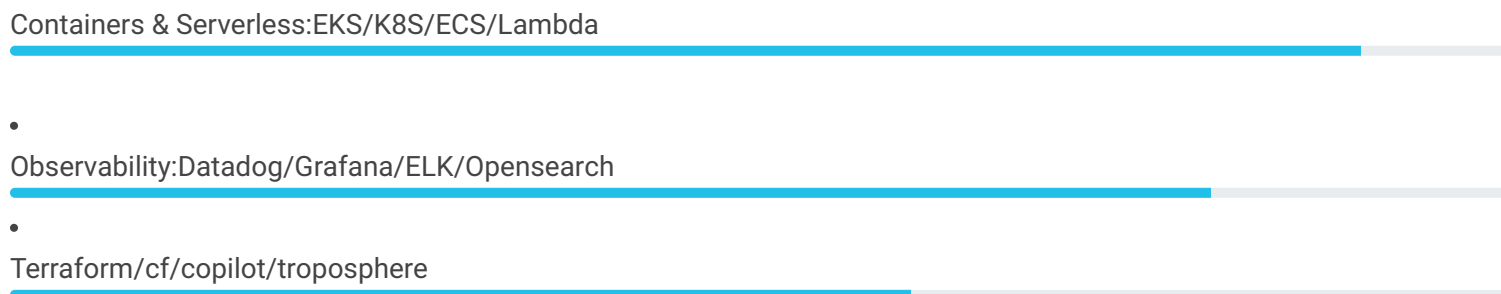| Hands on DevOps Coaching | Hands on Technical Coaching | Hands on Agile Coaching | Lean/Kanban/Agile/LeanUX |

| Project planning and costing | Lean Architecture and Engineering | XP Practices | Facilitation | Teaching | Mentoring |

| Alignment on clear goals and roadmap | Creating cultures of psychological safety | Empirical technical improvement through measurement |

| Threat modelling and risk assessment |

Languages

Java

node.js

Scala

Ruby

Perl

Python

C

Go lang

Engineering Frameworks

Springboot/JPA/Hibernate

Express/React/Svelt/GraphQL/MERN/PERN

Jupiter/junit/Cucumber JVM/Karte

Spark/Storm/Camel

AEM

Datastores

PostgreSQL/MySQL/Maria

Elastic Search

MongoDB

Databricks

Platform/Ops

Containers & Serverless:EKS/K8S/ECS/Lambda

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Observability:Datadog/Grafana/ELK/Opensearch

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Terraform/cf/copilot/troposphere

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Kafka/Hazlecast Jet

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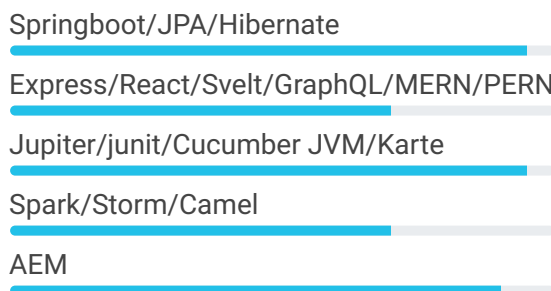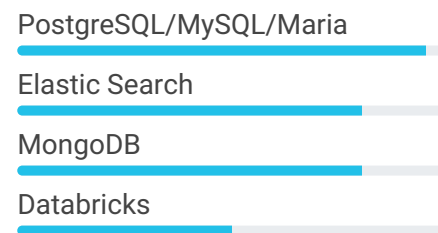
Security:burpsuite/wireshark/nmap/tcpdump/metasploit

Relevant Education

BSc Hon. Computer Science and Artificial Intelligence
University of Birmingham
1994 - 1999

Study in Continental Europe, ECTS Credits
Dipartimento di Informatica, Universita degli Studi di Pisa
1997 - 1998

ICP-ACC ICAgile Certified Professional - Agile Coaching
Trained by Shane Hastie, Director of Learning at ICAgile
2016

Interests

I am a homeschooling dad who is fascinated by the sciences as well as futurism🖐. I practice amateur astronomy in the night and love to go on coastal jogs during the day. My other life-long passion is music: I love listening to it as well as playing both the guitar🎸 and ukulele.