Matthew Spence

FULL STACK PRODUCT ENGINEER

With a passion for user experience & cross functional teams

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ENGINEERING MANAGER: COMPANIES JUNE 2024
LEAD ENGINEER: CARBON JUNE 2023
LEAD ENGINEER: FRONT END OCTOBER 2021

Novata October 2021 - Current

Responsibilities

Lead cross functional product engineering teams to rapidly deliver viable products from scratch. Oversee delivery from concept to launch and beyond. Manage and mentor software engineers and engineering managers, ensuring efficiency and quality across the team.

Communicate and collaborate with varied stakeholders and customers across the business to ensure product aligns with the needs of customers and the goals of the business.

Achievements

Joined as **engineer #1**. Established the team, scaling it out to 22 engineers, **oversaw and contributed to numerous hires**. Delivered a product that has provided **ESG data collection for over 10,000 companies** at a **87% report completion rate**. The product has facilitated a customer base of private market investors, representing **$12 trillion of assets under management**, over **$50 million in investment** to date, and **eight figure annual recurring revenue**.

I was selected to lead an entirely new product line providing carbon calculation and emissions data for private companies. I built a team and product that delivered **7 figure annual recurring revenue in its first year of launch**.

Promoted to engineering manager of "Novata for Companies", oversaw a number of squads including carbon calculation, regulations and private companies.

Drove AI adoption with **integration and coordination of 3rd party AI solutions**. In addition to **in house models** designed to streamline user workflows and reduce friction in the data collection process.

Skills & Technologies

TypeScript, React, Express, Node.js, PostgresSQL, Redis, Docker, Kubernetes, AWS, Git, AI, Product Design, Slack, Jira

CTO & COO

Friends or Friends January 2021 - September 2021

Responsibilities

Establishing operations and providing all necessary technical solutions. Sourcing and/or implementing software to facilitate marking, sales, operations, and customer support, quickly and efficiently, with minimal cost.

Additionally everything and anything required getting a bootstrapped start up ecommerce store off the ground. This truly was a many hats role, and at times included stepping well out my comfort zone into areas such as marketing, sales, customer support and plant care.

Achievements

Created packaging, fulfillment and support processes that have delivered **industry leading dispatch times and customer satisfaction** (trustpilot.com, reviews.io). Built an ecommerce fulfillment team with specialist skills around the care and dispatch of live plants from scratch. Procured and out fitted a warehouse space optimized for the business's operations. Created and nurtured leadership roles within the team, **gradually transferring responsibility to make teams self managing**.

Implemented bespoke software to meet the legal requirements for the distribution of plants. Designed and built to satisfy statutory standards with the absolute minimum impact on warehouse operations. This software allowed for an over **100% reduction in fulfillment costs**.

This was my first role where I had to step entirely outside of software engineering and tested my ability to creatively solve problems in an unfamiliar and high pressure environment. This experience was invaluable in my development of my **ability to think outside the box** and **pragmatically solve complex problems** in a novel domain.

Skills & Technologies

JavaScript, PostgresSQL, React, Redux, Ruby, Rails, Heroku, Git, Product Design, Ship Station, Shopify, Slack

Who I Am?

Accomplished Full Stack Software Engineer and Engineering Manager with over two decades of experience in driving high-performance product teams and delivering robust software solutions. Proven track record in scaling teams, optimizing development practices, and generating substantial revenue growth across multiple industries.

Originally from the UK, I now live in San Diego CA with full permanent US residency.

Experience

Web Application Development	**20+ years**
Scrum and Agile methodologies	**13+ years**
Leading remote teams	**10+ years**
Start ups (as founder and employee)	**10+ years**
React	**9+ years**
Ruby and Rails	**9+ years**

Highest level of education
Multimedia Design & Technology BSc

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Apr 21, 2022 👏 885 💬 12

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Jun 27, 2022 👏 155 💬 1

Example Code

ts-rest-mock
A Typescript library for automatically mocking HTTP requests based on their contract schemas.
github.com/msaspence/ts-rest-mock

PlantPassporter
A Ruby on Rails & React app for the required documenation for distributing live plants within the UK.
Access available upon request

Trakio Ruby Client
A Ruby Gem for Trakio's API.
github.com/msaspence/trakio-ruby

Trakio JavaScript Client
A JavaScript client for Trakio's API.
github.com/msaspence/trak.io.js

This Website
Not technologies I'd use if I was starting today. But I'm a pragmatist at heart and if it aint broke don't fix it.
github.com/msaspence/msaspence.com

LEAD ENGINEER, ANALYTICS

Groove Feb 2017 - May 2021

Responsibilities

Plan and execute architecture, and end-to-end implementation of the company's customer facing analytics and reports product. Ensuring quality of work for contributing engineers assigned to the analytics team. Liaise and coordinate with other teams, specifically system administrators, and Head of Engineering. Define and outline product requirements and vision with Head of Product.

Groove is a fully remote team distributed across several timezones. This role required a high level of autonomy solving complex problems alone when other team members were simply offline. Equally it required planning and collaboration with a number of teams and individuals spread across said timezones.

Achievements

Using a mixture of an off the shelf event streaming platform (keen.io), augmented with a bespoke in house system built on Elastic Search, we were able to **deliver a powerful reporting product quickly and efficiently**. This hybrid approach meant our solution **wasn't confined by the limitations** of the 3rd party product but was still **able to leverage many of its benefits**.

Utilized a number of existing systems already in place to create a highly resilient data collection endpoint that boasted 99.99% uptime.

Skills & Technologies

JavaScript, Docusaurus, MySQL, ElasticSearch, Kafka, React, Redux, Ruby, Rails, AWS, Git, TDD, jQuery, Emotion, User Experience, Product Design, Code Review, Trello, Slack

STAFF SOFTWARE ENGINEER

Holiday Extras Dec 2015 - Feb 2017

Responsibilities

Produce bug free, future proofed code, setting the standard by which others developers work. Translate the needs of the business into solutions. Working to and on the company values, the team standards and best practices.

Identify, react quickly and take ownership of any serious problems with quality. Improve the performance and development of the team. Sharing and supporting individuals by helping create team processes, following them and enforcing their use by others. Identify technical potential in others and work with them to improve.

Achievements

Delivered to market from scratch a post checkout trip planner that **increased average customer lifetime value by 21%**. Provided a mix of personalized free content and tools along with time sensitive product suggestions to lift per trip spend on our platform.

Skills & Technologies

JavaScript, React, Backbone, Redux, Ruby, Rails, AWS, Git, TDD/BDD, CoffeeScript, jQuery, Less/CSS, Scrum, Pods, User Experience, Product Design, Code Review, Jira, Slack, Pair Programming

CTO & TECHNICAL COFOUNDER

Trakio Apr 2013 - Dec 2015
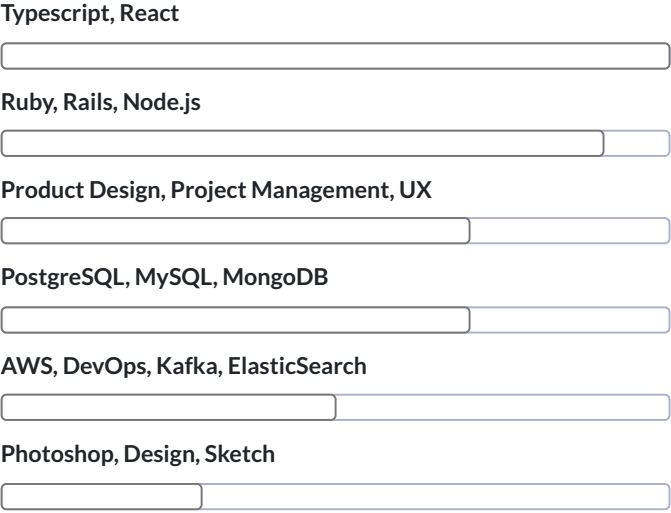
Responsibilities & Achievements

Helping companies increase activation and reduce churn by understanding their users better. Executed a number of pivots searching for a repeatable and scalable business model. Each time creating hypotheses and testing them.

As the CTO I was responsible for planning, building, managing, and documenting several production services and client libraries from scratch. I implemented the provisioning of our hardware infrastructure on AWS using Chef, along with service monitoring and redundancy, having had no previous experience of SysAdmin. I recruited and managed all our technical employees and contractors, managing their on boarding, training, and providing direction and mentorship for their personal development. Utilizing online tools to collaborate remotely, often across timezones.

Skills & Technologies

Ruby, Rails, Sinatra, Sneakers, OAuth, MongoDB, WebSockets, RabbitMQ, Redundancy, HAProxy, Nginx, Monit, Capistrano, Chef, AWS, Git, TDD/BDD, JavaScript, CoffeeScript, D3, Load Testing, Highcharts, jQuery, Less/CSS, Photoshop, Application Design, User Experience, Product Design, Infrastructure Design, Technical Support, Code Review, Trello, Slack, Pair Programming

Relative Strengths

Typescript, React

Ruby, Rails, Node.js

Product Design, Project Management, UX

PostgreSQL, MySQL, MongoDB

AWS, DevOps, Kafka, ElasticSearch

Photoshop, Design, Sketch

Other Interests

I understand the importance of a balanced lifestyle, and have many interests beyond software development. Here's how I like to recharge:

Being a Dad
I say being a Dad but really I mean vicariously reliving my childhood, going to scouts and playing Lego.

Building Models
At my core I like to build things, building software is incredibly rewarding but sometimes it's nice to work on something physical.

Hiking & Bouldering
I love being outside and away from the city. Southern California has so much to offer close by and I'm just starting to scratch the surface.

Snow sports
I'm a proficient skier and a distinctly average boarder. California wasn't the best move for snow sports but one day I'll make it back to the slopes.

Other Previous Roles

CTO & Technical Cofounder
Virally Jun 2012 - Apr 2013

Senior Consultant & Lead Developer
Fruitbowl Media Mar 2012 - Aug 2012

Web Developer
University of Kent - Web Development Team Nov 2007 - Mar 2012

Education

University of Kent
Multimedia Design & Technology BSc Sept 2004 - July 2007

Royal Hospital School
GCSEs & A Levels (UK High School) Sept 1997 - July 2004

A Levels
Business, Physics, Maths, Politics,

GCSEs
English Literature, English Language, Maths, Double Science, Geography, History, Maths, French,