

# MATT BESSEY

## PHONE

+44 7957 151 787

## EMAIL

[bessey@gmail.com](mailto:bessey@gmail.com)

## WEB

[bessey.dev](https://bessey.dev)

[linkedin.com/in/mattbessey](https://linkedin.com/in/mattbessey)

[github.com/bessey](https://github.com/bessey)

## TECHNICAL SKILLS

### EXPERT

Ruby, Rails, Sidekiq, RSpec, Sass, Git, SQL, Capistrano, GraphQL, JS, React, Apollo, DataDog

### GOOD

Elixir, Styled Components, Redux, Ember, AWS EC2, Docker, Kubernetes, Twilio, LookML

### WISH LIST

Elm, Reason

## TECHNICAL INTERESTS

GraphQL  
Performance Optimisation  
Site Reliability  
DevOps / SRE  
Domain Driven Design  
Data Engineering  
Functional Programming  
Design / UX

## REFERENCES

Available on request

## WHO I AM

I am a Principal Software Engineer who specialises in Ruby on Rails, based in Bristol, United Kingdom. I am most proficient in Ruby but am a firm believer in choosing the right tool for the job, and that the best code is often no code. I am seeking a role where I am expected to be the technical lead of large projects, acting as a systems architect, implementor, and point of contact for non-technical stakeholders.

## EXPERIENCE

(2019 — Present) **Principal Engineer (Backend), Immersive Labs** Bristol, UK

I alongside my Principal peers am responsible for maintaining the health of the platform as both our customer base and engineering head count scale up rapidly, in addition to product development. I focus on leading SRE and Data Engineering concerns at present.

- Researched, architected and implemented a low maintenance ELT data pipeline built with state of the art technologies including Looker, dbt, and Snowflake. This system is relied upon by multiple departments internally in addition to customers via platform embedded dashboards. I handled requirements gathering across departments, running a proof of concept trial comparing several vendors, and assessing the performance of each with respect to the data analysts' and business's needs.
- Introduced a design pattern to gradually refactor Rails monolith into cohesive domain oriented components with clear public APIs, gaining the de-coupling benefits of micro services without the operational overhead.
- Worked in a cross discipline team to improve the reliability of our Kubernetes remote desktop orchestration system. This required collaboration between engineering, ops, and cyber content. I led the overhauling of our Datadog powered monitoring system in the wake of an outage to identify precisely what went wrong, and enable all departments to make necessary changes to avoid recurrence.
- Influenced the design and best practices of an early stage GraphQL API, drawing from previous experience to develop a performant, secure, and stable API that is now the default choice for all new API requests.

(2013 — 2019) **Senior Software Engineer, Caring.com** San Mateo, California

- Designed and maintained for 2+ years a GraphQL API for our core Rails monolith, that now receives ~850k requests per day and is the primary API for the majority of clients. Maintenance has included instrumenting with APM software to identify and rectify performance pitfalls from memory over-allocation, N+1 SQL queries, and embarrassing I/O parallelism opportunities. In addition, wrote a production schema comparer script that runs in CI to prevent breaking changes from being released mistakenly.
- Worked in a team of 3 to replace off the shelf call centre software with poor uptime with an entirely in-browser Twilio powered Rails application used daily by ~100 sales staff, all remotely, from all over the US and the Philippines. The application was developed and launched in under 6 months, quickly proved more stable than the commercially available product it replaced, and was still used largely unchanged 4+ years later.
- Architected and built a fully featured and highly interactive CRM for our sales staff in Rails + React + GraphQL + Redux Saga. The application enables staff to, while on the phone to customers, record their information, saving it in realtime, and displays the best senior living facilities in their search location, for their needs, based on our ML predictor service's response. Results reorder in realtime as more information is entered.
- Developed an Airbnb style realtime map based search experience for senior care, using server-side rendered React inlined into Rails templates to allow for rich interactivity without affecting SEO or initial page load time. The SSR system uses a technique that enables an Express server to wait for React to fetch all GraphQL data dependencies before returning the rendered HTML output to Rails response, avoiding loading screens.

# MATT BESSEY

## PHONE

+44 7957 151 787

## EMAIL

[bessey@gmail.com](mailto:bessey@gmail.com)

## WEB

[bessey.dev](http://bessey.dev)

[linkedin.com/in/mattbessey](https://linkedin.com/in/mattbessey)

[github.com/bessey](https://github.com/bessey)

- Cut effective CI test times for our primary Rails monolith from 45 minutes down to 8 while reducing cost ~50% by moving us from Travis to Circle CI, and optimising the CI workflow by moving to a “build once + test 8x parallel” system. With CircleCI we are able to auto-balance the workloads of our parallel test workers such that as tests are added and removed, each worker adjusts the portion of the test suite it is responsible for to keep it's runtime at 1/8th of the total, with no human intervention.
- Interviewed candidate engineers, and, after hiring, mentored them through code review, pair programming, writing Story tech specs for them to work on, and walking through them together. We have often hired engineers with no prior Ruby experience and gotten them to a proficient level with no formal training beyond such mentorship.
- Hosted presentations to the whole engineering department to demonstrate new technologies I had researched that showed potential to solve technical problems at Caring, often resulting in their successful adoption.
- Provided much highly valued input to product managers on the design of future product developments, informing the direction of our core products, and helping to bring entirely new revenue streams to the business in a timely manner.

## OPEN SOURCE CONTRIBUTIONS (GITHUB)

**brillo** - ActiveRecord based developer database scrubber and loader gem

**vscode-rufo** - VS Code extension to provide support for rufo, the Ruby formatter

## EDUCATION

(2010 — 13) University of Bristol, **Computer Science BSc with 1st class honours**