

# TOM JOHNSON

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Software engineer with diverse technical and business experience and a strong track record of working across the full web stack. Experienced at working with stakeholders to convert business requirements into performant, scalable and well-tested applications and systems. Comfortable taking on new challenges and technologies. Skilled at communicating and building positive mentoring relationships.

## Skills

**Frontend:** TypeScript, ES6+ JavaScript, React, Redux, HTML, CSS3, RxJs, Jest, Jasmine, Web3

**Backend:** Ruby and Rails, Go, node.js, SQL, gRPC, some Java

**Devops:** Kubernetes, AWS, GCP, Terraform, Jenkins, CI/CD, Linux

Jun '20 - current	<b>Frontend Software Engineer</b> , J. P. Morgan Chase
	<ul style="list-style-type: none"><li>• I work in an agile team on a workflow automation tool that parses free text input into structured inquiries. It enables sales people to quickly access important contextual data and book trades. It uses a combination of local parsing, ML-backed NLP services and a domain-specific data service.</li><li>• The application is written in Typescript using modern React, Redux, RxJS and JSS on Openfin. It is very information dense so we focus heavily on good UX and performance considerations.</li><li>• My responsibilities include working with product owners, managers and designers to refine business requirements into deliverable tickets, flagging potential issues and presenting trade-offs as appropriate. I take a leading role in developing technical designs and project architecture.</li><li>• I proactively look for opportunities to iteratively improve team processes and the overall codebase's architecture and performance. For example, I recently proposed and delivered a project to introduce automated integration testing.</li></ul>
Feb - Apr '20	<b>Backend developer (contract)</b> , Palatinate Tech
	<ul style="list-style-type: none"><li>• I worked on a gateway API, written in Golang, enabling a new mobile product. As part of a remote team, I contributed to user flow design, overall project architecture and delivered new functionality.</li><li>• The API fetched data from several backend systems, so we used OpenAPI and contract testing to enforce correctness across system boundaries. I integrated OpenAPI into a legacy Rails application.</li></ul>
Sep '18 - Jan '19	<b>Full-stack engineer (contract)</b> , Koru Kids
	<ul style="list-style-type: none"><li>• I joined a fast growing start-up as their 3rd developer. I helped them automate key business workflows, leading to reduced acquisition costs and improved conversion rates.</li><li>• I worked with designers and business analysts to identify the priority workflows and design user flows with good UX. The development work was completely full-stack, from React and Tachyons in the mobile-first frontend through to data modelling and API work on the Rails backend.</li><li>• In a second project (remote while travelling abroad) I developed an in-app, mobile chat interface, again built in React. An interesting part of this was a reply-by-email feature, which I implemented on AWS using SQS and lambda functions. Everything was deployed via Terraform, including a CI/CD pipeline using CircleCI.</li></ul>

Mar '18 - Sep '18	<b>Full-stack engineer</b> , Mixlr
	<ul style="list-style-type: none"> <li>• Full-stack development on a Rails-based audio streaming platform. I led on implementing a new product and integrating it with the existing API and streaming server (Icecast) infrastructure. I also contributed to bug fixing and extensive production issue resolution on the existing product.</li> <li>• I took on something of a devops role, using Terraform to document existing infrastructure and implementing a new, Kubernetes-based platform for the new product. The complexity of Kubernetes was justified, in my view, as it replaced an ad-hoc collection of Ruby scripts.</li> </ul>
Feb '17 - Feb '18	<b>Full-stack developer</b> , Palatinate Tech
	<ul style="list-style-type: none"> <li>• I worked on a new gRPC API, written in Golang, that served core business data to a number of systems, starting from initial project design right through to a successful delivery.</li> <li>• We replaced a legacy frontend with a new one (using Vue.js) that better met current business requirements and was much more performant and easy to use. Deployed via Kubernetes on GCP.</li> </ul>
2014 - 2016	<b>Private Secretary to the Secretary of State</b> , Department for Energy and Climate Change
	<ul style="list-style-type: none"> <li>• I was the link between the Secretary of State and the department for my policy areas (chiefly renewables). I ensured the minister was fully briefed on important developments, advised policy teams preparing for ministerial decisions and ensured the minister's aims were implemented.</li> <li>• I prepared the minister for parliamentary appearances, Cabinet and ministerial meetings, visits etc. I also worked with colleagues across Whitehall to reach agreements. This role required strong communication skills, the ability to work under pressure and juggle many competing priorities.</li> </ul>

## **Education**

2011 - 2012	MA (Distinction) Politics, Security and Integration, University College London
2007 - 2011	BA (2:1) Russian and Spanish, Merton College, University of Oxford

## **Personal**

My current technical interests are building compilers and studying mathematics.

I spent 2019 backpacking abroad. During that time, I researched and wrote *The Computer Science Book*, a comprehensive, single-volume introduction to computer science for self-taught developers. It covers all the core topics of a computer science degree such as operating systems, networking, compilers, databases etc. to help developers from non-traditional backgrounds to improve their knowledge.

Before going travelling in 2019, I spent 3.5 years mentoring a child as part of the 'Friendship Works' charity. We would meet up most Saturdays and do fun activities such as going to the park and playing Pokémon Go.