

Andrew Garner

Summary

I'm a senior software architect and engineer with broad experience of large-scale web-based application design, development, integration, hosting, testing, security and maintenance.

I've worked extensively in multidisciplinary product teams and have an excellent understanding of designing for user needs. I'm able to translate between a technical and non-technical audience easily. I value empathy, communication and simplicity above all else.

Skills

Industry knowledge

- Agile methods
- Continuous delivery
- Service design
- Systems thinking
- Technical architecture
- Technical leadership
- Test-driven development
- User research

Tools & technologies

- Ruby
- Node.js
- Java
- CSS
- HTML
- Amazon Web Services
- Google Cloud
- Heroku
- Docker
- Kubernetes
- NGINX
- Puppet
- Terraform
- Elasticsearch
- MySQL
- PostgreSQL
- RabbitMQ
- Redis

Projects

HSBC Kinetic

January 2019 to January 2020

As a technical architect, I helped HSBC deliver a digital onboarding capability for its new digital business banking proposition, Kinetic, built with Google Cloud. This included:

- Working with and aligning multiple C-level business stakeholders, and collaborating with a globally distributed team
- Designing systems to capture anti-money laundering and 'know your customer' due diligence information
- Modelling onboarding processes using UML and BPMN
- Designing RESTful APIs using RAML
- Integrating Activiti's open-source BPM framework
- Integrating with HSBC core banking systems
- Integrating with ForgeRock OpenIDM and OpenAM identity and access management services
- Integrating with Onfido document identification and facial biometric verification services

GOV.UK

July 2016 to January 2019

As a senior software engineer, I helped the Government Digital Service with a number of its missions. This included:

- Migrating the core publishing platform to a new Content API
- Making tools to support publishers across government allowing them to audit and measure the performance of published content
- Iterating navigational patterns and validating a topic taxonomy using machine learning and natural language processing to make it easier to find relevant content
- Making a faceted search product for Brexit content
- Redesigning data.gov.uk, an open data platform

Pension Wise

September 2014 to April 2016

I helped HM Treasury launch a new service offering guidance for people regarding their pension options. This included:

- Discovery, alpha, beta and live stages of the project
- Building prototypes and testing ideas in a user research lab
- Building web applications with Ruby on Rails, Cucumber and RSpec
- Setting up pipelines to allow frequent, low-risk deployments using Heroku and Travis CI
- Configuring monitoring systems and dashboards
- Integrating with Twilio and Zendesk

Money Advice Service

December 2013 to August 2014

I lead a new team in a company-wide agile transformation developing a responsive and accessible website. This included:

- Adopting a hexagonal architecture in Ruby on Rails
- Adopting feature toggles
- Creating a design system containing styles, components and patterns

White Label Dating

I worked on a number of projects to support the rapid growth of the White Label Dating platform. This included:

- Mobile platform: A new web application and service layer consisting of a Ruby on Rails responsive frontend, Ruby REST APIs, and a Node.js router and authentication service. Continuous deployments to Rackspace Cloud infrastructure described and orchestrated with Puppet.
- Event-streaming platform: RabbitMQ and Ruby microservices supporting a number of use cases such as application push notifications, CDN purging and detecting dating scammers.
- Transactional email platform: A new pipeline for rendering and sending personalised member emails using RabbitMQ and Ruby microservices. Peak volumes were in excess of 20M emails per day.

Employment history

Founder and Principal Consultant at SureFire

October 2012 to Present

SureFire helps startups, nonprofits, enterprise companies and governments make digital products and services.

I have worked with clients including the Government Digital Service, HM Treasury, HSBC and the Money Advice Service.

Senior Software Engineer at Venntro

December 2009 to September 2012

Venntro is a Deloitte Fast 50 technology business. Their award-winning service, WhiteLabelDating.com, provides a market-leading online dating technology for brands and entrepreneurs. It is a multi-tenant platform supporting over 25k online dating sites, with a new member signing up every 3.5 seconds, generating revenues in excess of £50m/year.

I lead a development team servicing a stack consisting of Ruby, Node.js, ColdFusion, MySQL, RabbitMQ, Redis, Memcached, Sphinx and Puppet.

Software Engineer at iDEA

February 2008 to November 2009

iDEA is a design studio specialising in workplace consulting, interiors, sustainability and digital. I worked with clients including the BBC, Gensler, HP, Johnson Controls, Microsoft, CallisonRTKL and Unilever.

Software Engineer at Lighthouse

June 2004 to January 2008

Lighthouse is a small marketing and technology services agency. I worked on accounts for ASSA Abloy and Siemens Energy Services.

Qualifications

- BSc (Hons), Internet Computing with Industrial Experience [1:1], The University of Hull