

Jay Caines-Gooby

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A multi-faceted senior technologist with an entrepreneurial background in building prototypes and taking them through the funding stage to revenue generation.

In-depth practical experience of the varied aspects of mobile, internet & web applications; server and database architecture and development, cloud infrastructure, devops, user-interfaces, user-experience, information architecture, usability and product growth.

Commercial skills include new business development, business plan writing and start-up fundraising.

I'm an external assessor for the UK Government and have been judging R&D competitions for [Innovate UK](#) (part of UK Research and Innovation UKRI, the government's innovation agency) since 2013.

I enjoy connecting people and helping them network. I co-organised [BarCampBrighton](#), a weekend-long unconference and hackday between 2008–2012; a key task included raising sponsorships (typically around £10k). I volunteered as a code-mentor at [Young Rewired State](#). I'm a [UX Brighton](#) and [FFConf](#) volunteer, and have been live tweeting their annual conferences since 2012 and 2016.

Some personal projects of note are pinned on my [Github profile](#) and you can see the various contributions I've made to other people's projects in my [pull requests](#) (you need to be logged into Github to view these).

I blog at [jay.gooby.org](#) mostly as a personal aide-mémoire.

Employment history

January 2007 - present

Head of Technology, Charanga

Charanga operates a [music-teaching platform](#) used by primary and secondary schools throughout the UK, Europe and Australia. We work globally with international schools, and have partnerships with state and national-level government departments.

We've just launched in the US, under the [MusicFirst Elementary](#) brand.

I built the initial Charanga prototype and have worked on the platform since then. We were early AWS adopters, and have been running EC2 instances since 2008. I recruited and grew the development team and have been responsible for finding and mentoring interns. I'm involved with almost all the technical developments in the business, and keep an eye on the ops side too.

Recent projects include:

- Streaming video transcoding service; supply a source video and receive multiple bit-rate HTTP Live Streaming (HLS) videos, chapter markers, chapter thumbnails,

and VTT subtitles. Available as a command-line interface (CLI), a macOS Folder Action and a Dropbox-driven service.

- Continuous security monitoring with automated penetration testing tools. Commissioning custom external pen-tests by 3rd party security agencies.
- Docker build of legacy ruby platform to enable easy deployment to macOS silicon development machines, and AWS x86_64 and Graviton Arm servers
- Product Owner for single sign-on (SSO) and rostering integrations with Classlink, Edlink and Google Classroom for US schools accessing the MusicFirst Elementary platform. Liaised with the US sales & marketing team, the technical contacts at Classlink, Edlink and Google, wrote the integration specification and worked with Charanga's developers on the implementation.
- Product Owner for a migration of 100s of Wordpress marketing sites to static Astro builds. Worked with one of our junior developers to get them familiar with Astro, then guided their development of the porting work. Built a JSON API they consume to configure the site variations and the Continuous Integration (CI) system to automate deployments.
- Implemented Salesforce integration via Apex webhooks and our Rails platform to enable free trials of MusicFirst Elementary in the US.
- Product Owner for a cross-platform Android tablet, iPad, macOS and Windows desktop app to support offline use of our content. Specified the functionality, helped with GraphQL backend, helped to interview and hire a QA contractor.
- Built a CI and Continuous Deployment (CD) system using our self-hosted Gitlab instance, to allow teams to test and deploy their projects each time they git commit. Additionally configured its Service Desk functionality to aid our support and dev teams with triaging help and issues.
- Setting up and running a paid responsible disclosure programme for security researchers who find vulnerabilities on our platform.
- Automating releases to the Apple, Google Play and Windows app stores.
- Migrating to AWS Graviton instances.
- Moving from multiple AWS reserved instances to an autoscaling spot fleet.
- Scaled our platform during lockdown March 2020, as we added 750,000 new users in the first 2 weeks.
- A CLI to automate lots of disparate infrastructure tasks for our various product teams.
- A comprehensive operations manual and playbook.
- Datadog dashboards for monitoring key technical, performance and business KPIs.
- International billing in local currencies with Stripe and Transferwise (wise.com).
- HTTP/2 everywhere and migration of 160 partner sites to Let's Encrypt certificates.

- APIs for our Rails backend to support mobile and PWAs.
- Internationalisation work, not just on the UI, but on content and model data too.

February 2011 - July 2012

Lead Developer (freelance), Bonfire

Bonfire [overlaid a real-time chat interface](#) on top of twitter.com. I built the browser extensions for Chrome, Safari and Firefox, the initial web interface and the back-end architecture (in Ruby and Erlang) that supported the chat network and interfaced with the Twitter API. We raised a small seed round and then a slightly larger first round. We had 30K users, but couldn't get enough traction to grow significantly larger. The service closed in late 2012.

March 2006 – June 2007

Co-founder, snipperoo.com

A [micro CMS system](#). Initially a consultant and then after the contracted software house failed to deliver, I took over the development and built the launch version of the service using Rails.

March 2006 – 2012

Freelance

Variety of web, video & interactive TV developments:

- Crowd-sourced [prediction of the UK general election](#) using node.js & websockets.
- Tweeting [Brighton and Hove real-time bus departures](#)
- Facebook apps for agencies
- Video consultancy for Hebrides.TV, a community-based broadband television for the Outer Hebrides.
- mypay.tv; a WTVML application for MGt, who provide PPV and subscription services for many UK digital TV broadcasters. Sky TV viewers are able to subscribe to channels using the red button on their remote.
- Interactive TV advert which supported the Army's climb of Everest's West Ridge. Taken from concept to completion in 10 weeks.
- Donation applications for ITV's Soccer Aid series and miscellaneous applications for BSkyB (Final Chance To Save and Kylie Minogue) and Community Channel.
- Subcontracted by Reuters' design agency to advise on the interaction design and to code the WTVML for Reuters e-portal which was one of Sky's initial launch-partner sites.
- Contracted by BSkyB to build a high-profile launch service that demonstrated what the e-portal was capable of. Distributed 2000 Navigator remote controls in less than 24 hours with delivery addresses looked-up using the subscriber API and presented in pre-filled forms. The promotion was so successful that Sky increased the offer to 5000 and these were all taken 48 hours later.

November 2005 – August 2006

Co-Founder, Go-Du Ltd

The city of Brighton and Hove has a significant number of high-density, multi-occupancy flats. Conservation areas preventing the mounting of satellite dishes and a lack of cable-tv infrastructure, meant that the city's young, well-educated, high-income residents were under-served by digital TV. Go-Du Ltd was licensing an IPTV platform for rollout in the city; HomeChoice's sale to Tiscali ended this opportunity.

August 2002 – March 2006

Head of Software Development, Press Red Ltd

Head of Software, and sole developer for over a year, my code won Press Red an initial seed round from BSkyB and then a further £0.5 million investment from South East Growth Fund and Katalyst Ventures in March 2003.

Based on my work for Press Red at Future Platforms, and initially on my own and then as project lead, I enabled Press Red to become the first Sky-accredited, third-party tools provider for Sky's interactive TV advertising (i-Ad) platform.

Press Red generated its first revenue in December 2003, ending the year with a 96% share of the i-Ad business on Sky. Throughout 2004, it had a 100% share of the market and helped broadcasters and advertising agencies create over 300 interactive adverts.

Press Red had an interactive TV consulting arm where I acted as technical consultant to the business development team. My involvement included:

- A new games channel on Sky for a games publisher
- A content management system and churn tool for The Community Channel (a digital TV broadcaster), ABBA – a generic interface to Sky's ABB platform churn tool
- Transport for London journey planner on Sky Active
- Broadband streaming Flash video website for the Community Channel
- Cable service for Community Channel
- New Media Age Effectiveness Awards, 2004. Shortlisted for Best New Business

September 2000 – August 2002 **Co-founder, Future Platforms Ltd**

Co-founder of Future Platforms, a software company developing for mobile devices and interactive TV. We negotiated £110,000 in start-up capital from Outrider Ventures and three business angels, took the company to profitability by the end of its first quarter and eventually declined the investment offer due to project revenue.

Awards

- New Media Age Effectiveness Awards, 2001. Pocket Doctor; winner of Health category, beating Channel 4, Superdrug and Durex.

April 1996 – September 2000 **Senior Developer, Tui**

As sole developer or working as part of a larger team, I delivered back-end solutions for full-service e-commerce web sites, technically architected projects, designed databases and built client-side interfaces.

As a senior member of staff, my role also involved new-business development, pitching projects, project management and the hiring of new members of staff.

Projects of note

- First online fulfilment service for a UK high-street bank; Halifax mortgage and credit card applications

July 1995 – March 1996 **Systems administrator, MTi**

MTi made back-office trading systems software.

September 1993 – September 1994 **Sandwich Year Industrial placement, ICL**

UNIX developer

Education & Qualifications

1990 – 1995. Nottingham Trent University (formerly Nottingham Polytechnic), **BSc (Hons)**

Computing Systems

References: on request