

# CHRIS ASHTON

## Full-stack Software Engineer

✉ [chris AT ashton.codes](mailto:chris AT ashton.codes)



📍 Cambridge, UK

🌐 [ashton.codes](https://ashton.codes)

🔗 [ChrisBAshton](#)

## EXPERIENCE

### Government Digital Service

#### Lead Developer

📅 July 2023 – Present

- Lead Developer in the platform space, on 6 month EOI.

#### Senior Developer

📅 June 2021 – July 2023

- **Technical Lead on the Platform Security & Reliability team.**
  - ▷ Work closely with Delivery Manager and Product Owner to plan and prioritise work for our team of developers, SREs and security experts.
  - ▷ Regularly share knowledge through show and tells, mobbing sessions, code reviews and pairing. Introduced the 'mission leads' model, giving team members opportunities to gain leadership experience.
  - ▷ Wrote and delivered RFC-156 for automatic merging of internal Dependabot PRs, eliminating a toil task and freeing up developer time. Required considerable technical planning to build in a secure manner.
  - ▷ Reviewed and implemented the design for the new postcode lookup solution on GOV.UK, in a way that can scale with spikes in traffic.
- **Technical Lead on the 2nd Line Support function.**
  - ▷ Led efforts to broaden our drilling strategy to better prepare engineers for incidents. Rewrote our incident guidance documentation.
  - ▷ Created a rota generator to more fairly allocate support shifts, and drove change in shift pattern to increase available pool of developers.
  - ▷ Drove a change in policy to reduce the level of access we grant apprentices. Rewrote our user monitoring systems to make access more explicit & predictable. Automated much of this with Terraform.
- Led GOV.UK's response to a security advisory, liaising with tech leads and overseeing the patching of all vulnerable apps within a few days. Later raised RFC-153 to enable automated security PRs.
- Independently discovered and patched a cross-site scripting bug on a GOV.UK subdomain. I was credited in the security advisory. [github.com/alphagov/tech-docs-gem/security/advisories/GHSA-x2xw-hw8g-6773](https://github.com/alphagov/tech-docs-gem/security/advisories/GHSA-x2xw-hw8g-6773)
- I was GOV.UK's point of contact for a penetration test conducted by the cyber team, requiring walking them through the brief, explaining the architecture of GOV.UK and ensuring they had the necessary access.

#### Developer

📅 April 2019 – May 2021

- Technical Lead of the Developer Tools community. Made significant improvements to the processes around our documentation.
- Led a stream of work to reduce application errors across GOV.UK by over 90%. Introduced alerting so that new issues can be quickly fixed.
- Simplified infrastructure and cut costs by migrating a static site from S3 to GitHub Pages, and its build job from Jenkins to GitHub Actions.
- Contributed to a number of Ruby on Rails applications, working in agile, multidisciplinary teams that use scrum and kanban, adding new features backed by user research and fixing bugs through TDD.
- I've led on incidents, using alerts, dashboards and logs to debug issues on production. I've used DevOps techniques to monitor disk space and processes on machines, and used ActiveRecord and SQL queries to search PostgreSQL and MongoDB records.

## SUMMARY

*I am a creative, organised, pragmatic web developer with extensive back end and front end experience.*

## EDUCATION

### Aberystwyth University, Wales

#### B.Eng. in Software Engineering

1st class, with Honours, BCS-accredited

📅 Sept 2011 – June 2015

- **Graduated top of the class** and awarded *Best Bachelor Degree in Computer Science* out of approximately 80 people.
- Technologies used: Java, C++, C, Haskell, Python, Ruby, PHP.
- Key modules: Advanced Computer Graphics, Agile Methodologies, Machine Learning, Computer Vision, Data Structures & Algorithms.

### Lampeter Comprehensive School, Wales

AAB (A-Levels), B (AS Level),

13 GCSEs (11 at A\*/A)

## PUBLICATIONS

### 📰 Newsletters

**frequent11y** (2019 - Present)

I've published almost 1000 a11y newsletters to a large cross-government community and hundreds of independent subscribers.

<https://ashton.codes/subscribe-to-frequent11y>

### 👤 Talks

#### Paris Web conference

I represented the BBC in 2018 with my talk, "Publishing content to multiple platforms".

<https://vimeo.com/295213010>

### 📄 Articles

- **What I like about being a developer at GDS**  
[technology.blog.gov.uk/2019/08/14/what-i-like-about-being-a-developer-at-gds/](https://technology.blog.gov.uk/2019/08/14/what-i-like-about-being-a-developer-at-gds/)
- **I Used The Web For A Day...**  
Series of 5 accessibility articles for *Smashing Magazine*.  
[smashingmagazine.com/author/chrisbashton](https://smashingmagazine.com/author/chrisbashton)

- Proactively paired with new developers on my team, and was designated the 'buddy' to a new joiner. Started line-managing an apprentice.
- Co-ordinated an audit of all GOV.UK repositories, archiving 27 legacy repos to reduce the overhead of keeping dependencies up to date.
- Sifted CVs and took part in phone interviews for several developer roles. Wrote article about working at GDS, subsequently used for recruitment.

---

## BBC

### Acting Technical Lead

📅 Nov 2018 – April 2019

- Led the delivery of v1 of the new BBC article renderer: an isomorphic React single page application and shared component library.

---

### Senior Software Engineer

📅 Feb 2017 – Oct 2018

- Recruited and trained developers in India and Indonesia as part of BBC's global expansion. Line managed and mentored around a dozen developers, including several from the trainee and graduate schemes.
- Upgraded legacy tech stack to pure Node/NPM and Webpack (including bespoke plugins). Migrated deployment pipeline to AWS.
- Volunteered as "Accessibility Champion" and improved standards within the department, such as including progressive enhancement by default.

---

### Web Developer

📅 Feb 2016 – Jan 2017

- Devised and implemented an abstraction strategy to deliver Visual Journalism content across the BBC apps, web and third-parties. Wrote about this on *Smashing Magazine* and spoke about it at *Paris Web Conf*.
- Regularly created multi-lingual, full-stack applications for the web and the BBC apps, covering high profile events to tight deadlines.

---

### Test Engineer

📅 July 2015 – Jan 2016

- Led the maintenance of a screenshot testing tool (Wraith). Hand-built a BDD framework in Node. Set up Docker test suites on CI.
- Awarded *Best Contributor of the Year* at the BBC News Developer Awards.

---

### Trainee Web Developer

📅 July 2013 – Aug 2014

- Automated a large number of developer tasks, dramatically improving team productivity. Working with a senior designer, I templated visual formats that previously had to be crafted from scratch.
- Developed the *Commonwealth Games* feature, which was televised on BBC Breakfast. Being bilingual, I also took the initiative to translate it to Welsh. <https://www.bbc.co.uk/news/uk-28062001>

---

## Webdapper Ltd

### Founder

📅 Aug 2014 – Present

- Continued contracting for the BBC (one day per week) through Webdapper, which I founded during my final year at university. To date, I've also planned, designed and developed over 10 websites for other clients.

---

## PROJECTS

**StudentMunch.com** - food review site, using structured data markup to show as reviews in search results. Built as a Progressive Web App on top of AMP.

Service Workers   AMP   Offline first  
PWA   PRPL pattern   Structured data

**peepshowquot.es** - fan website for Channel 4 sitcom *Peep Show*: a searchable directory of gifs for every quote.

React   NodeJS   Jamstack  
AWS Lambda   Serverless

**SmartResolution** - online dispute resolution platform with plugin support for AI-driven resolutions. Awarded the Best Major Project prize at university.

[github.com/ChrisBAShton/smartresolution](https://github.com/ChrisBAShton/smartresolution)

Cucumber & Ruby   PHP   Composer  
SQL   PDO   LAMP

**Secretary** - automatic quality assurance editorial checks for WordPress posts. Built to be extensible and config-driven.

[wordpress.org/plugins/secretary/](https://wordpress.org/plugins/secretary/)

WordPress   YAML   SVN   Open-source

**3D Solar System** - solar system written in WebGL.

[chrisbashton.github.io](https://chrisbashton.github.io)

WebGL   JavaScript   HTML5   CSS3

---

## REFEREES

References available upon request.