Alex Muller

Address
9 Grosvenor Road
London, W4 4EJ
07525 370 388

Online
alex@mullr.net
http://alex.mullr.net/
https://github.com/alexmuller

Profile and interests

I write software for the web that fulfills a user need. I use simple, well understood technologies that are appropriate for the task in order to create small apps that can be loosely joined via HTTP APIs by machines and progressively enhanced on the front end to create an excellent user experience.

From the Computer Science part of my degree I gained familiarity with fundamental concepts such as object-oriented software development, algorithms and data structures. From Maths I developed an interest in statistical theory that has been with me since school.

I am also interested in the creation of media including television, film and radio, especially in how technology is aiding distribution. I am passionate about using the web to enable free and open access to information, particularly through contributing to projects like Wikipedia and OpenStreetMap. Recently I have found myself increasingly interested in preserving the history of the web and considering issues like link rot.

SC clearance until June 2023 ● British passport ● UK driving licence

Work and experience

Software developer, Government Digital Service (May 2013–)

Working on the Performance Platform, helping government service owners access the data behind their transactions. Making use of progressive enhancement to display graphs in as many browsers as possible. Participating in the second line (technical) support rotation for all GDS software and services, responding to alerts from GOV.UK production systems and improving infrastructure.

Tools: Python, Ruby on Rails, MongoDB, JavaScript, Puppet, Vagrant
On the web: `https://www.gov.uk/performance`

Research and Development software engineer, News International (July 2012–May 2013)

After graduating, I joined the small R&D team at News International in London. Using a variety of tools (including Ruby and Node.js) I helped create lightweight prototypes and proof-of-concept apps for *The Sun*, *The Times* and *The Sunday Times*, as well as monitoring and maintaining some apps in production. My favourite project was a marketing campaign titled Feel Good Piñata, a Node.js app with a real-world component that used WebSockets to provide a queueing system for users. I have experimented with responsive design as well as designing for different media such as Internet-connected receipt printers.

Tools: Ruby on Rails, Haml, Sass, JavaScript, Heroku, EC2, Node.js
On the web: `http://web.archive.org/web/201301/http://labs.newsint.co.uk/showcase`

Python and front-end web developer, GlaxoSmithKline R&D (July 2011–September 2011)

Over the summer between my industrial placement and final year at university I maintained an internal web application at GSK's Medicine Research Centre in Stevenage. The application was originally built predominantly using Python and JavaScript, and I was responsible for fixing bugs and adding new functionality as required.

Web & multimedia communications placement, GlaxoSmithKline (July 2010–July 2011)

During my placement year I worked on GlaxoSmithKline's corporate website as a member of their Global Media team. The placement involved writing HTML, CSS and JavaScript (primarily using jQuery) and working with non-technical stakeholders to understand and implement their requests. I was responsible for gathering information in preparation for a project to redesign the site, for example through interviewing users and creating surveys. A reference is available from GSKUK.HR@acs-inc.com.

One Click Orgs (2010–2011)

OCO is an online service to help groups with their legal, decision making and membership structure. I regularly worked over IRC and in person with other volunteer developers, committing Ruby on Rails, Haml and Sass code to the OCO GitHub repository.

York Students in Schools (January 2009–February 2010)

I was involved with the York Students in Schools placement scheme, spending half a day each week at a local school to assist the teacher with activities and any computing issues or questions. I feel that the placement was useful in many respects, primarily because it greatly improved my explanatory and presentation skills.

Web developer, Nouse (2008–2009) and Web designer, YSTV (2009–2011)

At university I became very involved with media societies, including the student newspaper Nouse and the television station YSTV. Redeveloping the newspaper's website was invaluable experience for working in a team, reinforcing obvious good practices such as detailed code commenting. YSTV has offered similar experiences, though there what I found most useful were the weekly "station meetings", where I was able to give opinions and be part of a group that makes decisions about the future of the station.

Education

BSc Computer Science and Mathematics (with a year in industry), University of York, 2008–2012

Degree classification: Second Class Honours, Division One (2:1)
Dissertation: Allocating optional modules to University of York students (79%)

My final-year project involved the creation of an application that allocates optional modules to students after collecting their preferences via a web interface. The creation of this application was supported by the University of York's University Teaching Committee.

The project covered two broad areas of computer science; the construction of the web application (which included gathering requirements, database design, user experience, testing & security), and performing the allocation based on students' preferences and factors like the number of students in a class, which is a constrained optimisation problem.

The application was trialled in March 2012 by the Archaeology & History departments and successfully allocated modules to 800 of their students. The pilot was evaluated as successful and the application was used in the following academic year, supported by the University's IT Services.

A reference for this project is available from James Cussens, Department of Computer Science.

Favourite modules:
    Probability Theory I (first year)
    Design of Interactive Systems (second year)
    Applied Probability (final year)
    Formal Languages and Automata (final year)
    Code Generation & Optimisation (final year)

St Paul's School, London, 2003–2008

A Level: Computing (A), Mathematics (A), Physics (C)
AS Level: French (A)

Reference

David Smith
Director of ICT, St Paul's School
Contact details available on request