

Marcus Povey

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About Me

Over my career I have helped to build life saving medical software, secure messaging systems, high performance video delivery platforms, and open source projects used around the world by companies, universities and governments.

I have designed platforms and APIs, set policy and direction, and have spoken at conferences about my work.

I am passionate about free software, open democracy, digital and human rights, and am an enthusiastic privacy advocate. More than anything, I'm motivated to use the internet to directly empower citizens around the world.

Professional Experience

Technology Strategist, Marcus Povey Consulting (2007 – Present)

marcus-povey.co.uk

I help businesses build modern, secure web applications. Some notable projects I was involved in:

KQED – teach.kqed.org: KQED Teach is a major media literacy platform which won the NAMLE MLM Award in 2017, previous winners include the PBS NewsHour, The Daily Show With Jon Stewart, Snopes.com, Creative Commons, and the Ella Baker Center/Van Jones. I built large parts of the core platform, based on Known, integrating Open Badges, Elastic search, and many other enhancements, to build a lightweight course management platform for one of the largest public media broadcasters in the United States.

Known – withknown.com: Known is a modern social publishing platform. In addition to being a core developer to the open source project I worked on various commercial enhancements, including AWS and Elastic search integrations, link unfurling, groups, ACL enhancements, and more.

Minds LLC – minds.com: Minds is a social network, with built in end to end encrypted chat, which offers users the ability to create their own accounts, as well as create their own social networks hosted on their platform. It has millions of active users, and was one of the fastest startups to raise over a million dollars in equity crowdfunding. Working with the Minds team, I helped develop their core platform to produce their initial product offering.

Sophos Ltd – sophos.com: Sophos is a world leader in antivirus and security products. I was brought in a number of times in order to audit and secure a number of high profile customer facing PHP applications. Additionally, I developed a SAML based single sign on integration for this platform, and performed a number of full system security audits.

Executive Networks – executivenetworks.com: A large professional social network built on Elgg. I built out much of the core functionality, as well as writing numerous integrations with other platforms (e.g LinkedIn), single signon and OAuth functionality.

Significant Open Source contributions: Over the years I have made many significant Open Source/Free software contributions. Notably I created a multiple site fork of the Elgg social network platform, which has been used by several companies as the core of their own product offerings. I have contributed core code and plugins to both Elgg and Known, and have numerous contributions to other projects, including WordPress & HTTPSEverywhere.

Information Architect, Latakoo (2010 – 2012)

latakoo.com

Latakoo uses adaptive video compression to allow footage to be sent over a commodity internet connection at high speed. Customers include NBC News, which uses the platform to send footage back to its newsroom from places like the Sochi Olympics, Air Force One and the Houston floods, where other options are often slower, more expensive, or not feasible.

I worked with the CTO and a team of programmers to design and build the platform and infrastructure behind Latakoo's core products. I designed much of the back end data systems, data storage and transfer infrastructure as well as designing the core APIs. These included a number of novel innovations which improved the speed and efficiency of the core products and greatly improved the usability for the customers.

Senior Architect, Elgg (2008 – 2009)

elgg.org

Elgg is a white label social networking platform, and is used by three nations as part of their governmental intranets, and is used by Fortune 500 companies like Hill & Knowlton, organisations like Oxfam, and universities all around the world.

I acted as senior developer and architect on the Elgg project, and had a major role in defining its architecture and features. Additionally, I was responsible for the development of the Open Data Definition, a flexible data portability format. In addition to software development, I had a role in defining policy and direction, and represented Elgg at conferences and to clients. In the process I developed relations with some of the Web's leading names.

During my time at Curverider I was involved in the development of a number of products and was involved in every stage of their development. Reporting directly to the CTO, I managed a small team of developers consisting of both full time members of staff and contractors in order to build Elgg and Curverider's other products.

Developer, Torex Retail (2006-2007)

Point of Sales (POS) software development supporting the company's flagship LUCAS product, used in stores around the world. My primary focus was to develop and maintain support for Electronic Fund Transfer (EFT) and Chip & Pin, PCI/DSS compliance.

Development Manager, e-San Ltd (2003-2005)

e-San was a medical software company, that grew out of an Oxford University research project. It developed mobile hardware and ground breaking software products that helped patients with chronic conditions (diabetes, asthma, COPD, etc) to better self manage their conditions; improving quality of life, outcomes, and reducing costs to the NHS. e-San's asthma self management product made the national press when doctors conducting a trial out of the Bristol Royal Infirmary credited the tool in saving the life of a young girl.

As the Development Manager I reported directly to the Development Director, and was responsible for leading a team of Software developers (full time and consultants). My team and I were responsible for all software development and system maintenance. I was personally responsible for designing and developing much of the core platform architecture that powered the e-San offering, and worked closely with researchers and clinicians to develop and improve the company product offerings.

Developer / Researcher, Secure Email Project, Oxford Brookes University (2002-2003)

This JISC funded research project exploring many of the issues of email security on modern diverse computing infrastructures. This project included the development of an OpenPGP proxy, and resulted in important contributions back to other open source projects. At the time the proxy was the only Java OpenPGP implementation, this functionality was contributed back to the wider Open Source community.

Support Engineer, Psion Teklogix (2001-2002)

Developing custom software examples and documentation to illustrate the functionality of a range of Psion hardware, as well as providing third line technical support to Psion corporate customers.

ATSR Development Engineer, RAL Space (1999-2000)

Industrial placement year working at the world famous Rutherford Appleton Laboratories developing custom software and managing the ATSR project website.

Education

BSc (Hons), Software engineering: Oxford Brookes University, UK

Technologies

Elgg, Known, WordPress, Symfony, Laravel, Zend, PHP, Python, Java, Javascript, Node.js, React (inc React Native), Express, HTML/CSS, C/C++, AWS (EBS, EC2, RDS, Beanstalk, Route53, IAM), Elasticsearch, MongoDB, CouchDB, Cassandra, MySQL, Redis, Linux, Git, Vagrant.