

Experience

Instruct ERIC (2019 – Present)

Principal Software Engineer, Head of IT

- Instruct ERIC is a pan-European organisation which makes high-end structural biology research technologies and methods available to researchers.
- Extensively involved in setting direction, was responsible for system architecture design, and was involved in high level strategy discussions, hiring, team management and mentoring. Wrote funding applications and scientific proposals.
- Delivered presentations at international scientific conferences, lead workshops and meetings, and represented Instruct and ARIA to high level stakeholders.
- Development of modern microservice based architecture, including leading development of modern GraphQL based APIs.
- Involved in numerous high impact projects, including the European Open Science Cloud (EOSC-Life), LifeScience ID (LSAAI), EOSC-Future, BY-COVID, Infraserve Cancer, FragmentScreen, EOSC-Beyond, and COVID-19 protein research portal. Project managed deliverables.
- Helped shape EU Open Science data sharing policy & represented Instruct at a high level, and was involved with multi-nation projects, including CORBEL & EOSC-Life.
- PHP, ARIA, JavaScript, Node, GraphQL, REST, React, Java, Python, OAuth, OpenID Connect, DevOps, Docker, Kubernetes, Ansible, MySQL, KeyCloak, HAProxy, FAIR principles, Agile & Scrum.

Marcus Povey Consulting (2007 – Present)

Owner / Freelance

- Successful consultancy and ISV company, specialising in Elgg and Known platforms
- Help businesses and individuals build modern, secure, web applications

Notable Projects

KQED Teach – teach.kqed.org

- KQED is one of the largest public media broadcasters in the United States
- KQED Teach is a major media literacy platform / lightweight course management platform
- Built large part of core platform, including integrations with Elastic Search, Open Badges, Amazon Cloud (AWS) support, integrations with Twitter, Facebook, Github and LinkedIn
- Collaborated with a large remote team of developers and open source contributors
- Won 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)
- PHP, JavaScript, HTML/CSS, Known, Elastic Search, Open Badges, Amazon Cloud (AWS)

Minds LLC – minds.com

- Minds.com is a free speech focussed encrypted Facebook alternative
- Built much of the initial product functionality (which was based on Elgg / Elgg Multisite), including multiple domains, PayPal/Bitcoin payment systems, WordPress integration, and connection with 3rd party APIs
- Worked with a distributed team to convert platform to modern Cloud infrastructure including Amazon S3 and Cassandra NoSQL database support
- PHP, JavaScript, HTML/CSS, Elgg, Elgg Multisite, Angular JS, Paypal API, Bitcoin, Cassandra, WordPress, REST API

... and more.

Latakoo (2010 – 2012)

Chief Information Architect

- Designed and built a platform to quickly transfer high quality video from journalists to TV newsrooms over any consumer internet connection, increasing flexibility and speed of reporting, while at the same time reducing costs.
- Designed and built a secure and performant mobile upload protocol that functioned in low bandwidth situations or areas with restricted and limited internet connections
- Built many aspects of the back end systems, including data storage and transfer infrastructure, and core APIs
- Platform used by customers, including NBC News, to send footage back from places like Syria, the Sochi Olympics, the Houston floods and Air Force One
- PHP, JavaScript, Linux, REST APIs, DevOps

Elgg (2008 – 2009)

Senior Developer, Technical Lead

- Designed and built open source white label social networking platform
- Used by the Australian, Dutch and Canadian governments, fortune 500 companies like Hill & Knowlton, organisations like Oxfam, and universities all around the world
- Developed novel data portability formats (which later contributed to the W3C Activity Streams format)
- Developed and maintained relations with some of the web's leading names in silicon valley
- Won InfoWorld award for best social networking platform in 2008
- Was a panel discussion member, and gave presentations at conferences
- PHP, JavaScript, Linux, MySQL, Shibboleth

Torex Retail (2006-2007)

Developer

- Point of Sales (POS) software development for flagship LUCAS products
- Main developer for Electronic Fund Transfer (EFT), Chip & Pin and PCI/DSS compliance
- Java, SolveSE, Linux, Windows

e-San Ltd (2003 – 2005)

Development Manager

- Start-up producing medical patient self-monitoring solutions for Diabetes, Asthma and COPD
- Senior project developer on e-San commercial and medical trial solutions
- Developed mobile Diabetes project client
- Developed unified server solution, and ran all back-office / DevOps
- Supervised small team of full time staff and contractors
- Made national press when doctors credited software for saving a child's life
- PHP, Java, MySQL, Linux, Apache, Java ME / MIDP, DevOps

Oxford Brookes University (2002 – 2003)

Researcher – Secure Email Project

- Designed and developed encrypted email software in Java for JISC funded project
- Wrote papers and reports related to the project
- Java, Linux, OpenPGP

Psion Teklogix (2001 – 2002)

Support Engineer

- Developed software to demonstrate functionality of a range of Psion hardware
- Provided third line technical support to clients
- C/C++, Psion SDKs

RAL Space Science (1999 – 2000)

Development Engineer – ATSR Project

- Created ATSR project portal to assist project scientists and customers around the world
- Built software tools to assist the project scientists
- Linux, HTML, VMS

Education**Oxford Brookes University (2001)**

BSc (Hons) Computing and Software Engineering

Technologies

Elgg, Known, ARIA, WordPress, Symfony, Laravel, Zend, PHP, Python, Java, JavaScript, Node.js, React, React Native, Express, HTML/CSS, GraphQL, C/C++, AWS (EBS, EC2, RDS, Beanstalk, Route53, IAM), Elasticsearch, MongoDB, CouchDB, Cassandra, MySQL, Redis, IPFS, Linux, Git, Vagrant, Docker, Kubernetes, Ethereum (Solidity, Web3js).

Additional Information

Organised: *Barcamp Transparency conference, Oxford "Twestival" fundraising event. Co-founded Known Open Collective.*
Open Source contributions: *Elgg, Known, WordPress, HTTPSEverywhere, Bouncy Castle JCE, and more...*