Lewis Watson

Senior Software Engineer

KY2, Kirkclady, Fife GB

Software Engineer with over 9 years commercial experience spanning Cloud Web Applications down to embedded C applications. Currently a Senior Application Developer at CGI's Open Digital Services Centre where we specialise in developing customer solutions using open source technologies.

SKILLS

Integration	Web Services	Cloud
jboss fuse esb activemq messaging apache camel drools bpms spring framework	rest soap	azure rackspace openshift containers (docker)
Data	Build Chains	Web Development
postgresql mongodb mariadb/mysql microsoft sql server elasticsearch	apache maven msbuild apache ant	html5 css sass javascript extjs bootstrap

Backend Languages

java | c/c++ | javascript | python

WORK EXPERIENCE

Senior Software Engineer at ODSC - CGI UK

May 2014 - Current

http://www.cgi-group.co.uk/

One of the first hires to CGI's newly opened Open Digital Services Centre in Glasgow, which specialises in developing solutions around Open Source and Open Standards. I have been fortunate to be involved in helping to shape the processes and culture of the office. During my time here I've been involved with a number of customer projects, acting as project lead for two of them. I have also driven the adoption of an open source development tools such as GitLab for source control, Taiga for project management and Mattermost for team collaboration.

- Currently senior developer on a project developing an Enterprise Service Bus to connect an Automated Traffic Management System to roadside devices. I'm gaining experience with technologies such as Red Hat JBoss Fuse Integration Services, Red Hat Openshift Cloud, Kubernetes, Apache Camel, Apache ActiveMQ and JBoss Drools BPMS.
- Project lead on an agile scrum team who delivered a data analysis system for a public sector client. The system used ElasticSearch, Kibana, MongoDB, Docker, and some custom Java components.
- Project lead on a team using Kanban for a public sector client who needed to modernise their web service infrastructure. We introduced a number of improvements including containerisation using Docker, automated monitoring with Nagios, an online issue tracker using Taiga, and formal documentation of processes and configuration.
- Senior developer on a remote agile scrum team developing Java components for a large public sector project. During this time I gained experience with Apache CXF, JBoss Fuse ESB, and JBoss Portal.
- Produced a number technology demonstrations to aid in attracting business to the centre. This involved technologies such as docker, database virtalization, MongoDB, JBoss Fuse Enterprise Service Bus, Open Data Geospatial systems, Hadoop, and Lumify big data analysis + visualisation platform.
- Career mentor for two Modern Apprentice Software Engineers.

Software Engineer at Thales UK

June 2007 - May 2014

https://www.thalesgroup.com

Joined the Thales Graduate Development program straight from university and worked with them for 7 years. During this time I gained full stack development experience spanning web technologies (front-end and back-end) down to embedded application development. As part of the 4 year graduate development scheme I also benefitied from training that focused on soft skills such as project management, collaboration and presentation skills.

 Developed a web based inventory tracking system with a HTML5 user interface (ExtJS, jQuery, Bootstrap) served by a PHP/ASP backend connected to a MySQL database. My role also involved design, server configuration,

- replication, app deployment, and setting up a Continuous Integration environment for my team.
- Technical lead for a project developing an Engineering Resource Management system that automatically matched engineers to roles within the company. A key feature was the use of a business rules management system (BRMS) that enabled site administrators to change the applications business logic on the fly, allowing the system to rapidly adapt to changing priorities.
- Technical consultant for a team developing Windows C++ applications that used Nvidia CUDA to perform calculations on GPU's. I advised on best practice, converted the Visual Studio code to compile in GCC and install via the RPM Package Manager in Linux. I also designed and implemented an automated process for deploying the system into production devices via PXE network boot and a custom flavour of Fedora Linux.
- Developed a big data system designed to enable a major project to exploit large data sets more efficiently. I took on the roles of Software Architect, Developer, and Sysadmin in order to design, implement, and deploy a solution. The system incorporated C++ worker processes controlled via a HTML5 web app.
- Upgraded network interfaces on hard real-time embedded C application.
- I mentored a number of Year In Industry (YINI) and summer placement students.

EDUCATION

Bsc Hons Computer Science at Heriot-Watt University 2003 - 2007

LANGUAGES

English

Native speaker

INTERESTS

Technology

Side Projects

Skills acquired: containers | cloud | Skills acquired: my workshop | open source / open standards | my home office | my shed novel uses of web technologies (e.g. nodejs and electron)