Mark Wickens

eng mgr. / leader / scrum/ full stack / java / agile / security

mark@wickensonline.co.uk +44 7917 653012 Windermere, UK urbancamo.github.io

Currently a Software Engineering Manager at Hansard Global plc having worked fully remote for over 13 years. I manage a team who are both remote and in-office. A champion of Agile Development Practices I'm qualified as a Certified Scrum Master, with a practical and forward-thinking approach to business relationships. Operating in the FinTech space for over a decade I've been involved in bringing multiple Award-Winning Business-Critical Online Systems to production serving a client base of over 60,000 with more than \$1.3b in invested assets.

I enjoy a hands-on approach to both software and team management, supporting and hiring engineers as well as providing mentoring and coaching in best practices for software development – always with security built in from the ground-up. Experienced in the challenges of Digital Transformation, re-engineering monolithic application stacks into Azure cloud-centric systems & services. Able to juggle the complexities of management and development responsibilities, including supporting and maintaining business critical systems.

Extensive development experience across a broad cross-section of industries and systems, including FinTech, Distributed Tactical Communication Systems, Scientific Visualization, 24/7 Electricity Trading, Graphical Information Systems, Call Centre, Government, Mathematical Models and User Interface Modelling.

Software Engineering Manager Hansard Global plc

05/2017 - Present (4 years 10 months)

Working with a seasoned team of professionals on a suite of award-winning secure online applications and complex back-end systems. Security, performance, and high availability are key attributes of these systems with 60,000+ clients and brokers self-managing more than \$1.3 billion of invested assets. For the past three years I have been involved in whole-system digital transformation project to migrate in-house applications to Azure Cloud.

My role is split between hands-on development and managing several engineers as direct reports. The development staff I manage are based in both the UK and the Isle of Man. Line-manager duties include holidays and sickness, performance appraisals, staff conduct, team communications, and promoting values and mentoring team members. I report to the Director of IT to allocate and prioritize work, provide estimates, updates on progress and assess risk.

We use Agile development practices, test driven development, and run projects according to the Scrum Methodology. I am a Certified Scrum Master. I've worked remotely for over 13 years and managed a remote team for the last four. I have a disciplined mindset together with excellent communication and timemanagement skills.

I was promoted internally to this position from the role of Senior Software Engineer. Fully remote from day 1, with office visits once a quarter.

- Digital transformation of n-tier java applications into a cloud-centric architecture utilising microservices, event driven services, bus-based communication and secure API management.
- Development and maintenance of numerous online and internal business-critical systems.
- Security-centric approach using client & server validation, data sanitisation & escaping (OWASP).
- Introduced Scrum Agile ceremonies to improve development process via inspect-and-adapt cycles.
- Our systems won 'Best Digital Proposition' award at the International Advisor Global Financial Services Awards '19

Senior Software Engineer/Full Stack Hansard Global plc

06/2009 - 05/2017 (8 years)

As a full stack senior software engineer, I worked in a dynamic team developing and maintaining secure online systems and internal applications. The in-house IT department gives us a competitive advantage through a responsive approach to business requirements.

Technologies used in these applications include Enterprise Java, Hibernate, HTML, CSS, JSTL, JSP, XML, XSL/XSLT and Oracle 12c SQL. I am proficient in the Atlassian toolset including Confluence, JIRA, Fisheye and Crucible. Continuous integration builds use Jenkins and Maven. We use the excellent IntelliJ tool suite with Subversion and GIT for SCC.

As a member of the security team a combination of mentoring and training has provided me with a solid set of secure coding practices based on OWASP recommendations. We use rigorous code reviews, examining both architecture and low- level code constructs together with penetration testing to ensure all software systems, both internal and external, are secure from the ground-up. Development highlights at Hansard include an online signup and self-service authentication software, the internal user-management system, and a comprehensive documentation processing system. I am always trying to improve the user experience and engineer code to the highest standards.

Java Consultant

Argos

05/2009 - 06/2009 (2 months)

Design and prototype for a multi-threaded, socket-based, real-time protocol translator. Designed using use-cases, UML diagrams and prototyped Java 6 and XSL/XSLT/XML code. Prototype utilized the Apache MINA socket-based API.

Documentation provided included extensive report, outline development plan including estimates and recommendations.

Enterprise Java Developer Environment Agency

02/2008 - 03/2008 (2 months)

Enterprise Java Developer working on the DPS3 Project, using a Java, Spring and Oracle technology stack.

Senior Software Consultant

Valtech

01/2005 - 01/2007 (2 years 1 month)

Development and maintenance of CMS system using the following technologies: Java, J2EE, EJB, JDBC, Weblogic 8.1, DB2 SQL, C++, XSL, XML, Ant. Provide consultancy and support to the EDS IT Support Team to improve procedures and practices in the building and deployment of next generation DWP infrastructure provided by IBM and EDS. Broad technical toolset including ant, Java, Websphere deployment and administration, MQ Series deployment and administration, AIX administration, shell scripting, XML, XSL, XSLT, DocBook.

Technical Subcontractor

IBM

10/2003 - 06/2005 (1 year 9 months)

Development work on the Department of Work and Pensions' Customer Management System (CMS) currently in use throughout job centres in the UK for the processing of claims. Complex XSLT/XSL stylesheet development for the transformation of XML data and presentation of data in PDF format (using FOP). Java/J2EE/EJB development on gateway interface systems.

Configuration and deployment of J2EE application into Weblogic 6.1/8.0. Performance analysis. C++ development on Curam server.

Java Developer

Prescription Pricing Authority

12/1999 - 03/2000 (4 months)

Analysis, architectural design and development of an internet based application for the query and update of a database using the following technologies: iPlanet 4.x/6.x, Tomcat 4.1, J2EE (including JSP, Servlets and JDBC technologies), XML, Oracle PL/SQL, Microsoft SQLServer and Swing. XML export module and JDBC based transfer and update utility. Development of additional multi-tier functionality within a Swing thick-client/Servlet and EJB server based application.

Java Architect Gamma Projects

03/2000 - 06/2000 (4 months)

MOD Contract. Analysis, architectural design and development of a distributed tactical communication system using the following technologies: Weblogic 6.1/JBoss 2.4.4, J2EE (including EJB, JMS, RMI and JDBC technologies), Servlets, XML, log4j, TCP/IP (socket-based communication), Oracle PL/SQL and Swing. Tested using JUnit. Development of a sophisticated data-mining graphical user interface using the Swing toolkit. Ported the application from Weblogic to JBoss server. This included: configuration changes, custom security changes, logging changes. Fixed price contract to develop a Swing based application to visualize graphs of network equipment and their associated connectivity, with data provided by an Oracle Database via JDBC. Display algorithm performs optimization of graphical element placement and link routing to minimise link crossing and link length.

Java Architect

British Gas Research & Development

06/2000 - 12/2000 (7 months)

Fixed priced contract to analyse, design, develop and test an Object-Oriented Gas Network Analysis Engine prototype in Java, utilizing RMI and a Swing graphical user interface. Prototype consists of a Java analysis server with a Swing toolkit-based graphical client, communicating via RMI. Object oriented analysis, design, coding and testing was performing using the UML/IDE tool Together/Enterprise 4.0 running on the

Linux platform, using Sun JDK 1.2.2.

Notes: Delivery better than specification, two weeks early. Based on recommendations of report generated in previous contract.

Software Engineer

British Gas Research & Development

01/1996 - 01/1999 (3 years 1 month)

Fixed priced contract to analyse, design, develop and test an Object-Oriented Gas Network Analysis Engine prototype in Java, utilizing RMI and a Swing graphical user interface. Prototype consists of a Java analysis server with a Swing toolkit-based graphical client, communicating via RMI. Object oriented analysis, design, coding and testing was performing using the UML/IDE tool Together/Enterprise 4.0 running on the Linux platform, using Sun JDK 1.2.2.

Object-Oriented Analysis, Object-Oriented Design and Development of a multiplatform Solaris / Linux / OpenVMS) Java application to provide System Administration utilities to existing application. Designed using Together/J UML tool, uses Java Native Interface (JNI) platform-specific layer, Swing graphical user interface and Remote Method Invocation (RMI).

Development work covering the full life cycle (including object-oriented analysis and design) on large (500K lines), multi-user (36 sites in UK) Gas Analysis software utilizing the following technologies: C/C++/Fortran, CORBA, Java, OSF/Motif, X-Windows, XDesigner, Sun/Solaris, Linux, OpenVMS.

Education

1st Class BSc. (Hons) Computer Science & Electronic Engineering, University of Hertfordshire

Personal Interests

Author of the <u>ADIF Processor</u> – a Spring boot AWS hosted application that visualizes radio contacts on Google Earth.

I operate portable amateur radio from the Lake District fells and other mountainous regions in all seasons, making contacts across the globe as part of the worldwide Summits on the Air programme.

Organiser of the Summits on the Air Lake District bi-annual event, bringing folk in from around the world.

Organiser of DEC Legacy – a yearly meeting of enthusiasts of the DEC computer lineage.

Maintainer of the Wainwrights on the Air amateur radio programme website – I've modernised the site with SOTA API integrations, a discourse server, mapping and Golang based contact import facilities.