

Bill Hedworth

Bristol

01234567890 | bill.hedworth@gmail.com | <https://github.com/Bigsy>

Profile

JVM developer with 4 years of Clojure and 10 years of Java experience. My most recent role has been developing MixRadio's RESTful core microservices in Clojure on AWS, serving personalised music to millions of users worldwide. I have a lot of experience in Big data processing on EMR and have a solid background in test automation. Looking for a modern agile working environment with challenging projects and an opportunity to further my skills.

Qualifications

BCS

ISEB CERTIFIED SOFTWARE TESTER

Bristol

Feb 2007

University of Wales

2:1 BSc (HONS) COMPUTER SCIENCE

Aberystwyth

September 2000 - May 2004

Coleg Ceredigion

BTEC NATIONAL DIPLOMA IN IT APPLICATIONS

Aberystwyth

September 1999 - June 2000

Penglais Comprehensive

2 A-LEVELS, 10 GCSE'S (A-C)

Aberystwyth

September 1992 - June 1999

Employment

LINE Corporation - MixRadio

SENIOR SOFTWARE ENGINEER

Bristol

2014 - Present

With MixRadio being sold to LINE corporation by Microsoft my role was a continuation from that at Microsoft.

- I recently developed a full stack Clojure and ClojureScript service which enabled in house mixmasters to manually tweak MixRadio's recommendations engine.
- I Integrated Salesforce with MixRadio's internal CRM system. A Clojure service which extracted all relevant data from Salesforce and parsed it to AWS SQS and persisted it to Redshift.
- I produced an EMR processing pipeline to transform our massive user taste profiles into a suitable format and export it to Salesforce for recommendation emails.
- I've written various Cascalog and Pigpen Big data flows over millions of user events to support and improve music recommendations eg find and boost emerging "hot" tracks.

Microsoft

SENIOR SOFTWARE ENGINEER

Bristol

2013 - 2014

Microsoft purchased Nokia's mobile business. My work was focused even more on the core music recommendations of the business building fault-tolerant, performant Clojure services and data processing at scale.

- Played a key role in creating a complex music recommendation service for similarly liked tracks and artists. This replaced the 3rd party reliance on The EchoNest. Built with Clojure on DynamoDB.
- I built a highly performant microservice to match track and artist metadata to MixRadio's internal representation.
- I created a service to warehouse client user events from Kafka to S3, encrypting any sensitive user data.
- I designed and produced a service to produce new album release events to notify interested users, in Clojure on MongoDB.
- I built up the majority of MixRadio's client 'views' API, it produced customised views of JSON data allowing clients to build their pages, coded in Java and Spring.
- A key contributor to MixRadio's core services:
 - Users music taste profile service, based on MongoDB in Clojure.
 - An API to serve session based curated mixes, in Clojure and Redis.
 - The music catalogue and search engine, based on Java, MySQL and Apache Solr.

Nokia

SENIOR SOFTWARE ENGINEER

Bristol

2009 - 2013

During my time at Nokia I transitioned from automated tester, to a full time Java and then Clojure developer. My role from newest to oldest:

- *Developer:* Designed and built key services to provide mobile phone notifications to millions of users.
- *Developer:* In 2012, I joined a small team working on Nokia's first production Clojure services with the ultimate aim to replace our 3rd party integration with The EchoNest.
- *Developer:* Nokia ceased to support Meego and I moved into full-time Java development. I was one-half of a pair that integrated with a 3rd party company, The EchoNest. Integrating their music recommendations produced Nokia music's first iteration of its internet radio (later to be called MixRadio). This was a Java and Spring based service.
- *Build Manager:* I became the Bristol office's package manager for the Meego (Linux-based) operating system. I was responsible for integrating Bristol's music software into the Debian based operating system via apt package management.
- *Testing:* Developed both a front end web test frameworks around JBehave and Selenium2. An also a FitNesse suite to test a large scale music search engine. This mainly involved writing fixtures in Java to enable less technical testers to write wiki based tests.

Alterian

SENIOR AUTOMATED TEST ENGINEER

Bristol

2008 - 2009

A UK-based supplier of marketing automation software and services. I was their sole automated tester and worked on their "Next Generation" web-based platform.

- Web test framework based on Selenium, Selenium Grid, and Gallio/MbUnit 3 running on EC2.
- Implemented a JMeter Test Suite.

Experian (Decision Analytics EMEA)

SENIOR AUTOMATED TEST ENGINEER

Bristol

2006 - 2008

Talgentra was acquired by Experian, I progressed into a more senior automated testing role.

- Test framework based around FitNesse and Watir written in Java.
- Administering the QA departments testing environments; large array of pre-configured virtual machines.
- Aided in conducting interviews, took responsibility of the QA department in the absence of the QA manager.

Talgentra

JUNIOR SOFTWARE ENGINEER

Bristol

2004 - 2006

Talgentra produced utility billing software for electricity, water, gas and telecommunications. This was my initial introduction to Java, writing some Junit and automated acceptance tests.

Skills

Programming	Clojure, Java, ClojureScript, JavaScript, C#, Golang, Ruby
Clojure	Ring, Core.async, Midje, Schema, Compojure, Amazonica, Lein, Boot
ClojureScript	Reagent, Dommy, Hiccup, Figwheel
Java	Spring, RESTeasy, Hystrix, Jersey, Hibernate, Maven, Nexus, Jackson
Database	DynamoDB, MySQL, MongoDB, Redshift, Redis, Memcached, Neo4j
BigData	Cascalog, PigPen, Hadoop, Cascading, Pig, Hive
Message Queues	SQS, Kafka
Web	React, Bootstrap, AngularJS, JQuery, Node.JS, Chrome Extensions
General	Linux admin, AWS, VMware, VBox, Jenkins, Git, Scrum, Kanban, REST, JSON, XML

Interests

Keen IT enthusiast, I have a passion for all things tech related and enjoy my PC gaming. A keen supporter of open source software, I try run Arch Linux on everything I can. Passionate about music and a bit of an audiophile. Enjoy sports, go running most days, completed many obstacle course races, also a keen cyclist and can be pretty geeky about my bikes.