

SKILLS

Current

Recent

Dim & distant

ActiveMQ

Agile

Ant

Apache HTTP Server

ATDD

BASH

BDD

Camel

CVS

ClearCase

ClearQuest

Coherence

Cucumber

CSS

CXF

ATG Dynamo

Eclipse MAT

EJB

FIX

Flex

GIT

Grafana

Hadoop

Hibernate

HTML

IBM MQ

Ice

InfluxDB

Introscope

Javascript

JAXB

JAX-RS

JAX-WS

JBoss

JDBC

Jetty

JMS

JNDI

jQuery

JProfiler

JSON

JSP

JSTL

JUnit

Linux

Maven

MATLAB

Mockito

MySQL

Oracle

OSGi

Python

R

REST

RTC

Scala

Scrum

Solace

Solaris

ServiceMix

SOAP

JOHN DOWNING

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SUMMARY

16 years core Java & related technologies. 12 years in banking (FX). Multi-threading. Memory and performance profiling. Test automation. Tech Lead experience.

EDUCATION(🎓) & EXPERIENCE

🎓 9/2016 – Current

Goldsmiths College, University of London

I am currently studying for an MSc in Data Science at Goldsmiths, with a tech stack including Python, R, MATLAB, Scala, Hadoop and Spark. The goal of my final project is automatic song lyric suggestion, using ideas from topic modelling, hidden Markov models and recurrent neural network language models.

8/2015 – 7/2016

Royal Bank of Canada Capital Markets | City, London | Contract

At RBC I was part of the FX Distribution team, maintaining an FX Streaming platform as well as migrating components from a legacy system to a REST microservices architecture. Alongside application development, I helped develop a framework for automated integration testing and streamlined the CI/deployment process. I also instrumented the Streaming platform, uploading performance metrics (method call durations, GC pause times, host stats) to InfluxDB for subsequent display on Grafana dashboards.

6/2014 – 6/2015

State Street Global Markets | Canary Wharf, London | Contract

At State Street I was part of an agile team, building components for their FX Accelerated Growth programme. This involved the development of OSGi bundles for their Global Transaction Hub (an ESB, based on Apache ServiceMix), to provide message routing functionality and back-to-back trade generation for FX risk management flows. As with HSBC, I was involved in the development of a test automation framework – this time using the Cucumber framework – which allowed the team to practice ATTD/BDD. I was also involved in pushing forward the development of the GTH platform.

3/2011 – 2/2014

HSBC Global Banking & Markets | Canary Wharf, London | Contract


At HSBC I was technical lead on the FlexRate project – building a greenfield Transactional FX trading platform. Notable achievements included the design of the externally facing REST API, the design of a test automation framework (mis)using the Java Instrumentation API, and more playing about with classloading than should ever be necessary. There was also more emphasis on DDD in this role, for example the identification of key domain concepts and terminology. This was both for external use, since FlexRate clients were often not typical FX market participants, and also within the team - the latter involving ongoing attempts to ensure that all stakeholders agreed upon (and stuck to) a shared way of describing the problem domain and functional requirements.

Spark
Spring
Subversion
SVG
Swing
Sybase
Tibco
Tomcat
UML
Unix
Velocity
Weblogic
WebSphere
XML
XSD
XSLT

6/2009 – 3/2011

RBS Global Banking & Markets | Bankside, London | Contract

For this contract, I was back at RBS (following a break for a Masters degree) and once again working on the core FX RFQ trading platform. Primarily this involved the integration of various ECN channels over FIX/Radianz, as well as integrating internal channels over ZeroC's Ice. The resulting increase in load - on what was by then a legacy application - provided many "opportunities" for investigating threading, timing and memory issues. One upshot being that, with help from Wily Introscope and Eclipse Memory Analyzer, I was able to track down a long-suspected memory leak in the pricing team's API.

 **9/2009**

Goldsmiths College, University of London

MSc Music Mind & Brain (Distinction)

Dissertation: Investigating the relationship between kinematics and preferred beat period in the perception of rhythm.

4/2008 – 9/2008 *RBS Global Banking & Markets | London | Contract*

Details omitted for brevity, available on request

4/2007 – 4/2008 *UBS Investment Bank | London | Contract*

Details omitted for brevity, available on request

5/2006 – 4/2007 *RBS Global Banking & Markets | London | Contract*

Details omitted for brevity, available on request

3/2003 – 4/2006 *UBS Investment Bank | London | Perm*


Details omitted for brevity, available on request

6/2001 – 3/2003 *BuildOnline | London | Perm*

Details omitted for brevity, available on request

7/1999 – 4/2001 *Quidnunc | London, New York, San Francisco | Perm*

Details omitted for brevity, available on request

 **6/1999**

University of Sheffield

BSc Cognitive Science (1st Class)

Dissertation: Modelling a community of neural network agents, and their development of a shared "language" to describe their surroundings.

PROFESSIONAL QUALIFICATIONS

8/2003

Sun Certified Enterprise Architect for the Java 2 Platform

2/2001

Sun Certified Programmer for the Java 2 Platform

LANGUAGES

Spanish (tengo que practicar mucho)

Greek (μυλαω λιγο)

INTERESTS

Music, songwriting, skiing, mind/brain/consciousness