# James Bowkett

## http://github.com/jbowkett

#### **Profile**

A professional, hands-on technical lead with over 15 years software development experience predominantly using Java in various finance-related enterprise environments. I always strive to employ TDD/BDD practices and SOLID design to produce clean code.

I am an Associate at the Graduate Developer Community, attending both GDC and LJC events and conferences.

# **Employment History**

## January 2015 - Present • Principal Consultant • Excelian, London

Excelian are a consultancy specialising in grid/cloud and big data technologies in the financial services industry.

- Lead architect for a review of a failing market risk project
- Developer for Lloyds Banking Group fixed income rates using 29 West Ultra Low Latency messaging bus.
- Leader of the internal development community to mentor other consultants in development best practices and continual learning.
- Core contributor to Mache A Java open source in-memory cache, backed by Cassandra, MongoDB or Couchbase.

## September 2014 - December 2014 • Proton Consultant • Prosperity Capital Management, London

Prosperity Capital currently manage in excess of \$4bn in assets. Following the demise of Lyagushka I was responsible for an extended period of handover for their trade lifecycle platform.

• Led the remote team to ensure they could develop new features and support the existing platform.

### December 2013 - September 2014 • Lead Developer • Lyagushka, London

Lyagushka provide a full trade lifecycle platform for a large (>4\$bn) private equity fund incorporating complex business rules. The platform is developed using MongoDB, Mysql and Ruby on Rails employing highly agile methodologies for planning (morning standups, planning poker, Kanban boards) and development (TDD, BDD and pair programming).

- Promoted to team lead following successful first year with the company.
- Introduced constructor injection technique to the team to assist with unit testability.
- Modelled, designed and implemented a complex stock movement service.
- Designed and implemented instruction services to output SWIFT messages.
- Oversaw the implementation of an external team to deliver an FX and security pricing project.
- Streamlined the development process by introducing new tools to the company such as Harvest & Trello.
- Part of the management team responsible for the orderly wind down of the company.
- Demonstrated the platform to potential clients and investors.

#### October 2012 - December 2013 • Senior Developer • Lyagushka, London

- Successfully cross-trained to Ruby and developed new components 3 months earlier than anticipated by the team.
- Quickly became proficient in the Ruby toolchain Ruby 1.8.7, Rails 2, Rspec, Cucumber, Github, Capistrano on OS X.
- Designed and implemented new components for accessing company family trees, error logging, IBAN formatting.
- Presented at regular customer demo meetings to the fund partners.
- Led the design for an ETL component for loading data from external sources.
- Tackled different aspects of technical debt within the main codebase (following in-house workshops with Michael Feathers and Matt Wynne).

# April 2007 - September 2012 • Software Engineer • Cygna Negra Capital Management, London

Cygna Negra was a long-short hedge fund trading US equities. Prior to its incorporation, I was approached by the CEO to be responsible for all software engineering, systems setup and administration.

- Single-handedly created the software function, standardising on Subversion, Maven 3, Jenkins and TRAC.
- All code was implemented in Java 6 using constructor injection with a SQLServer 2005 data warehouse (~400 GB) using a datamart/OLAP cube architecture.
- Responsible for all stages of the development lifecycle from requirements gathering and design through to coding, testing, maintenance and production support. Development was undertaken in short rapid prototype cycles.
- The role involved implementing the data requirements from the lead quant to extract data from sources such as S&P Compustat, web pages, individual researchers and online public document libraries (e.g. SEC) and cleaning the data

to present it in a consistent format so it may be input into the quant's statistical models/simulations (e.g. Monte Carlo), and ultimately used to make trading decisions.

- Designed and implemented a highly-configurable ETL tool, allowing for quick and easy development and deployment of new datafeeds. It downloaded feed files (over http(s) and ftp) from such institutions as the SEC and USPTO. Incorporating Xstream, reflection, XSLT, Apache commons-net.
- Created Tomcat 7 web applications for accessing and analysing OLAP data. Incorporating the following technologies: Spring 3, Stripes, Shiro, JSP 2, JSTL, Infinispan 5, Java.nio Memory mapped files, CSS, JQuery, Highcharts 2, JQueryBlockUI, DisplayTag, Ajax.
- Created a tool for users to research company information in a structured manner, parsing recognised web pages automatically. Incorporating JDIC/JExplorer and Webstart. (Since leaving, I have implemented an open source custom proxy server to enable augmented browsing that would obviate the need for a custom browser component).
- Developed a Proguard Maven 3 plug-in to composite obfuscating and signing mojos prior to Webstart creation.
- Created various autonomous web page scraping agents.
- Implemented a workflow server and client to allocate work for the research client and other research and internet downloader/scraping tools, utilising JMX as the transport layer.
- Created a text cleaning library to enable the matching of manually-entered strings containing foreign characters and misspellings using Secondstring and Simmetrics libraries.
- Created a Gridgain implementation of string matching algorithms for matching noisy company name data to publiclylisted company names.
- Successfully presented development process to non-technical prospective board members.
- Mentored a temporary researcher to the level of a junior programmer able to develop production-ready code using SQL and SQL Server Reporting Services.
- Created company-wide backup and disaster recovery strategy.
- Made strategic purchasing decisions e.g. Google Apps.

#### May 2006 - April 2007 • Senior Software Engineer • Iris Financial Solutions, London

Iris Financial supplied real time Java FX pricing engines to major investment banks.

- Supported and liaised with business users of Citigroup's main benchmark FX spot and forward pricing engine.
- Created emailing functionality for notification of upcoming stale fixing results for forward and spot bench FX pricing engine, using Java mail, XSLT and Xerces.
- Implemented new functionality to Citigroup's main real time market making FX spot pricing engine.
- Fixed issues in main real time FX spot and forward codebases.
- Created new functionality for configuring the main real time platform using JMX and configuration visualisations.
- Implemented configurable export mechanism of JMX data using Spring.

## June 2005 - May 2006 • Associate Analyst Programmer • JP Morgan Asset Management, London

JP Morgan Asset Management provide asset management services to both retail and institutional investors.

- Seconded into build manager role, introducing a monthly release cycle leading to 20 successful releases to production after a prior period of several late releases.
- Wrote the requirements for a data maintenance platform and managed its implementation by Accenture.
- Upgraded three portal applications from Websphere 4/Epicentric 4 to Websphere 5/Vignette Application Portal 7.2.
- Managed the migration of all department source code from PVCS and CVS to Clearcase.

# June 2002 – June 2005 • Senior Software Engineer • Searchspace, London

Searchs pace provided anti-money laundering and fraud detection products to tier-1 retail banks in the UK and US.

- Technical Lead for development and deployment of 3 new DB2-based Sentinel products for US Bank (the project totalled around 7 man years of development effort and around 12 TB of warehoused data). Responsibilities included: designing solutions; all configuration management; leading a team of 9 developers, 5 test analysts and 2 technical authors; mentoring junior developers; quality control of code and documents; ensuring requirements were kept under change control; presenting at several meetings with the senior executives of US Bank in Minneapolis to instil confidence in Searchspace's ability to deliver the solution.
- Sentinels were implemented using progressive summaries of data rolled up to different levels of granularity/dimensions in an OLAP style.
- Researched new technologies for prototyping configuration control and IEF upgrades. The technologies used include dynamic classloading, portlets, JSPs, Servlets and XML persistence mechanisms.
- Presented several internal training courses to customer services, developers and professional services staff (groups comprised of 10 to 20 people) on configuration and extension of IEF.
- Data Tier Technical Lead for a new version of IEF. Designed and implemented a Sentinel Template a new product for producing sentinels for new deployment projects for US Bank, and Royal Bank of Scotland.
- Interviewed prospective job candidates leading to several successful new hires.
- Mentored new hires to ensure they became effective in their new role.

- Technical Lead for the first project deployment in Canada with a new alliance partner, Sapient. This involved briefing
  the 10-man Sapient team on how to configure core parts of the framework, and working with them in Toronto to design
  the Scotiabank solution. Responsibilities also included being an active member of the team; writing Java and SQL
  code to integrate with the Sapient codebase to create events during multi-threaded database batch processes.
- Programmed IEF on major client deployment projects including Scotiabank, Barclays, RBS, NYSE and HBOS.
- Created workarounds to various framework issues such as loading 6.5 million customer account records safely into 32-bit memory while still assuring fast and efficient lookup.
- Regularly seconded into technical lead role, including resolving technical and project issues for team members, other project teams and clients and managers.
- Administered an Oracle 8i Enterprise Edition database.

# June 2000 - October 2000 • Graduate Software Engineer • Searchspace, London

- Debugged the main framework Java code.
- Bug fixing for Bank of Scotland deployment (including client liaison).

July 1999 - October 1999 • Student Internship • Searchspace, London

July 1996 - December 1998 • Various technical support roles during sixth form/university holidays

# **Education and Qualifications**

- 2014 Mongo University Mongo 101
- 2004 British Computer Society MBCS
- 1997-2000 University of Sussex 2:1 (Hons) BSc Computer Science
- 1995-1997 Westcliff High School For Boys Sixth Form 4 A-levels
- 1995-1996 Southend Adult Education Community College A-level in Computer Science
- Summer 1995 SEETEC NVQ Level 2 diploma in Information Technology
- 1990-1995 Westcliff High School for Boys 10 GCSEs
- 1982-1990 College Saint Pierre Preparatory School