Thomas Barker

Software Development, Blockchain Stuff, Advice and DevOps



Aims

My experience is mainly in fast growth start-ups, as such I am very familiar with scaling and operational challenges. I would like to use that experience to help people trying to do something new, whether in an early stage start-up or an established company striking out into a new area. I take a particular interest in retail finance, infrastructure and trust-minimised (ex. blockchains, onion routing, etc) systems.

Skill Areas

Web Development Developed code for three websites featured on television.

Retail Finance Worked in both consumer lending and asset management. Have passed the **SII Certificate in Securities & Financial Derivatives**. Experience of two in-house exchange & trading systems.

Blockchain Working on a PoC for a major UK institution, an open source project and involved in an Ethereum study group.

Infrastructure Everything from database clusters to office networking.

Back Office Integration Data integration, administrative Uls, screen scraping.

Technologies

- Ethereum Blockchain Stack [web3js, Truffle, Parity, etc]
- Core Java technologies including J2EE, Hibernate and Spring Boot.
- Continuous integration [ex. Git, Subversion, Gradle, Travis CI] and code review tools.
- Excellent Oracle PL/SQL skills (also Oracle database administration)
- Linux server administration and scripted deployments
- Docker, Kubernetes and Amazon Cloud Services
- Basic ES6 and NodeJS

Education

University of Warwick - BSc. Hons. Computer Science, 2004.

Final Year Project in Peer-to-Peer Social Networking Applications.

Experience

Senior Developer/Head of Blockchain; PQ Solutions - June 2017 - now

Delivery of a DLT PoC to a UK regulated entity. Details under NDA.

Hacksociate; Barclays TechStars Accelerator Program — March - June 2015

Assisting teams with advice on development, infrastructure and security in FinTech over the 90 day program. Unofficial blockchain expert. Occasional software development in NodeJS.

London/Stockholm/The World

cv@thomasbarker.com https://thomasbarker.com

https://github.com/tbarker







Development & Infrastructure, BullionVault; - March 2009 - November 2014

I have worked on all components of BullionVault's software and infrastructure, which currently cares for over \$2bn of client assets. First outside technologist recruited. Everything from visual Javascript effects to PL/SQL-based settlement accounting. Introduced BullionVault's European banking facilities and wrote the logic that today handles all of BullionVault's incoming bank payments; as well as planning, purchasing and installing the current data centre. Helped to manage our transition from the founding team to a 5 person technology team organised by Kanban. Left on friendly terms with an accelerated full vesting.

Developer, Zopa UK Ltd; London - March 2006 - Feb 2008

Front-end & back-end development (mainly .Net), web analytics, management reporting, e-commerce support and analysis, office networking, MS SQL Server admin, development env. design and support. Introduced source control and bug tracking to the organisation.

IT Analyst, Morgan Stanley UK; London - Summers of 2003/4

Integrated credit risk reporting system. Prototyped web system for currency settlement processing

Contract Work

PQ Solutions

Built and scaled the PQCheck biometrics signature and evidencing engine in Java, including the necessary cloud and devops work with AWS and Docker. Some business development and PoC work centred on blockchain/DLT technologies.

Safello AB

Simplification and migration of new micro-services platform to a low-maintance cloud infrastructure. Introduction of an Agile development cycle, continuous integration and advice on operational/regulatory reporting.

Prodigy Finance

Carried out an assessment of their outsourced p2p lending software development to-date. Advised on Agile project methods and future technology options.

Zopa UK Ltd

Delivered redundant server on Windows 2003 with .Net & SQL Server 2005.

The Coca Cola Company

Built server-side of the Coke Bubbles video sharing and chat widget. First substantial application of Joost's widget API.

Joost.com

Music recommendation mini-site mapping Joost's music content over last.fm's "likeness graph".

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Academic Work

My dissertation surveyed the area of social networking software, demonstrating that such systems are workable and could be implemented without raising irresolvable privacy concerns. Created a p2p prototype communicating using XMPP.

Non-Profit

Large Nginx/PHP Site Over 1.4 million monthly unique users and over 2.5TB of images served per month with the aid of a CDN. More details on request.

Privacy Angels A smart contract based privacy solution.

Open Source I have a small number of open source hobby projects, which can be seen at https://github.com/tbarker .

Interests and Activities

Previous organiser of BarCampBankLondon, now a 60+ person mini-conference on financial technology and innovation. I am currently an Affiliate Member of the IET. I blog occasionally on finance and technology at thomasbarker.com.

Publications

<u>Payments Information in the Real World</u>: Peering through a Broken Text File Computing & Law Magazine, February 2015

Industry Qualifications

Oracle Certified Professional

Exams of Oracle Database 11g: Administration I, II and Oracle Database SQL Expert.

SII Certificate in Securities and Derivatives The UK's base-line regulatory exam for Approved Person status.

Sun Certified Enterprise Architect for Java

For architects for designing J2EE applications to be scalable, flexible and secure.

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