# Chris Seaton

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Award winning researcher, software development engineer, and manager with a proven ability to initiate, develop and ship both systems and end-user software. Published expert with world-class knowledge of Java, Ruby, virtual machines, programming languages, concurrency and parallelism. Frequent speaker at major industry conferences including JavaOne and RubyConf.

## **EXPERIENCE**

Research Manager, Oracle Labs, Chester (fully remote)

2013 - present

- Initial and lead developer, and principal investigator, of TruffleRuby (<a href="chief">chrisseaton.com/truffleruby</a>), an implementation of Ruby on the JVM using the Graal dynamic compiler and the Truffle AST interpreter framework. The project was open sourced into JRuby for incubation in 2014, selected as a finalist for Ruby Prize in 2016, and spun off into GraalVM in 2017.
- Found, recruited, and am leading a distributed team of five expert developers located around the world.
- Contributor to Sulong (github.com/graalvm/sulong), an interpreter and JIT for LLVM-based languages such as C and C++.
- Represented Oracle Labs at conferences worldwide by delivering invited talks and presentations.

#### Director, Medicapps, Chester

2010 - 2017

- Collaborated with two surgeons on Mersey Burns (<a href="mailto:chrisseaton.com/merseyburns">chrisseaton.com/merseyburns</a>), a novel app for burns treatment developed for iPhone and since ported to iPad, iPod Touch, Android, Blackberry Playbook, and HTML5 browsers. The app pioneered as the first regulated medical app in the UK and won the eHealth Insider Award for Mobile Healthcare (2013) and the NHS North West Health Innovation Award for Excellence in Innovation (2011).
- Received £40,000+ in NHS funding and represented the company in interviews by BBC TV, radio, and a national newspaper.

#### Captain, British Army, worldwide

2007 - present

- Led teams of up to 40 people in the UK and around the world dealing with extreme time and resource pressures.
- Coordinated medical care to an infantry battlegroup of over 1,000 soldiers on operations in Afghanistan.
- Ran a recruit training troop responsible for on-boarding young people into the military.
- Second-in-command of an officer-training unit attached to the University of Manchester, teaching leadership.
- Now second-in-command of a reserve light cavalry squadron with 70 soldiers and millions of dollars of equipment.

### **EDUCATION**

PhD, Computer Science, The University of Manchester (2015)

- Thesis: 'Specialising Dynamic Techniques for Implementing the Ruby Programming Language.'
- Also published work on parallelism, concurrency, and Scala.

### Master of Engineering, Computer Science, The University of Bristol (2007)

- Graduated First Class and awarded the faculty prize for academic and social achievement.
- Thesis: 'A programming language where the syntax and semantics are mutable at runtime.'

## **SKILLS**

R&D, Java, JVM, Ruby, Python, C, virtual machines, programming languages, concurrency, parallelism, mobile health

#### **COMMUNITY**

- Maintainer, The Ruby Bibliography (<u>rubybib.org</u>)
- Program Committee Member, Emerging Languages, JavaOne 2016
- Program Committee Member, Dynamic Languages Symposium (DLS) 2017, 2016, 2014
- Program Committee Member, Implementation, Compilation, Optimization of Object-Oriented Languages, Programs and Systems Workshop (ICOOOLPS) (2017)
- Technical Reviewer, 500 Lines or Less
- Academic Visitor, The University of Manchester