jonathan**knowles**

computer software professional

location

Tainan, Taiwan

contact

me@jonathanknowles.net
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languages

English
(native)
Mandarin Chinese
(intermediate)

skills

♥ Haskell, OCaml
Scala, Java, Python
Git, Mercurial

interests

functional programming, type safety, distributed systems, scalability, concurrency, algorithm design, natural language acquisition

education

2001–2004	**B.A. Computer Science** Awarded distinction (1st class) for dissertation: "A scalable platform for distributed computing, utilising thread-safe, high performance data structures and asynchronous message processing."	University of Cambridge
1996–1998	**B.A. Chemistry** (completed two years)	University of Oxford
1994–1996	**General Certificate of Education: Advanced Level** Mathematics (A), Further Mathematics (A) Physics (A), Physics Special Paper (Distinction) Chemistry (A)	Poole Grammar School

experience

2008–2012	**Citrix Systems Research & Development, Cambridge, UK** Feature Lead for XenServer Dynamic Memory Control. Made multiple contributions to XenServer, XenClient products. Awarded patents for work in memory allocation and storage.	Software Engineer
2007–2008	**Canonical Ltd, London, UK** Worked on Launchpad.net, an open-source collaborative project management system used by thousands of software projects around the world.	Software Engineer
2004–2007	**Citrix Systems Research & Development, Cambridge, UK** Co-developed the integration of Citrix Web Interface with IBM WebSphere Portal Server, leading scalability and concurrency testing for the project. Developed the management interface for the integration of Citrix Web Interface with Microsoft SharePoint.	Software Engineer
2001–2002	**Computer & Design Services, Dorset, UK** Designed a protocol and system to synchronize disconnected databases over SMTP.	Software Engineer

patents

2013	**Dynamic time reversal of a tree of images of a virtual hard disk.** US 20130219135
2011	**Dynamic reallocation of physical memory responsive to virtual machine events.** US 20110138147