

Rob Hague

Email: rob@rho.org.uk

Date of Birth: 7th March 1978

Nationality: British

Marital Status: Single

Education

September 2000 – June 2004

PhD in Computer Science, University of Cambridge

Research degree, investigating the use of end-user programming in a domestic ubiquitous computing setting. The work combines theoretical aspects such as programming language design and cognitive psychology with the implementation of practical systems.

October 1996 - June 1999

BA in Computer Science (1st class), University of Cambridge

Taught degree, including courses in all areas of Computer Science, a group project (using Java) and an individual software engineering project (using C++ and Open GL).

September 1990 - June 1996

The Dronfield School

A-Levels in Biology, Chemistry, Maths with Mechanics, and Physics (Grade A), STEP papers in Maths and Physics (Grades 1 and 2), and S-Level in Biology (Grade 2).

9 GCSES (4 A*, 3 A, 2 B) including Maths and English Language at A*.

Employment History

January 2007 – Present

Senior Engineer, Azuro (UK) Ltd

June 2004 – January 2007

Engineer, Azuro (UK) Ltd

Member of the R&D team for a growing provider of EDA (Electronics Design Automation) software tools, working on cross-platform GUI, user scripting support and core infrastructure in a combination of C++, Java and Tcl. Responsible for design and implementation of new features. Additionally, implemented and maintained build and other development tools in Python and other languages, and mentored new starters.

September 2000 – June 2004

Supervisor, Computer Science, University of Cambridge

Small group teaching of undergraduates for a range of courses from the BA and Diploma in Computer Science, and supervision of final year individual projects.

September 2002 - September 2003

Supervisor of Studies for Computer Science, Fitzwilliam College, University of Cambridge

In addition to above, assisted Director of Studies with interviewing and selection of undergraduate candidates.

January 2003 - April 2003

Intern, IBM Research Zurich

Working as part of the E-Business Solutions group, prototyped an interface for the selection and invocation of Web Services, using vision-based tracking of physical markers.

April 2001

Instructor on Advanced C++ Course given at Sony Computer Entertainment, Europe

Presented short lectures and assisted with practical exercises on a three-day course in advanced C++ techniques for professional programmers.

September 1999 - September 2000

Member of Technical Staff, AT&T Laboratories Cambridge Limited

Part of a research team working on software for the Sentient Computing project, centred on exploiting a fine-grained location

system to create context-aware applications. To support such applications, the project also created a distributed architecture, based on CORBA objects and using a relational database for persistent storage. Most applications were implemented in C++ using a variety of libraries developed within the project. A small number were implemented in Python.

June 1998 - August 1998

Intern, SCO Inc. (now Tarentella Inc.)

Research and initial implementation of various technologies for inclusion in a subsequent version of Tarantella, a remote desktop product. This involved integration of C++ and Java, on a variety of Unix platforms.

Publications

Hague, R and Robinson, P (2006) End-user programming of reconfigurable systems: Experiences with Auto-adaptive and Reconfigurable Systems. Software—Practice & Experience , Volume 36 Issue 11-12, John Wiley & Sons, Inc.

Presents the Lingua Franca multi-language end-user programming architecture, the subject of my PhD research.

Hague, R (2005) End-user programming in multiple languages. University of Cambridge Computer Laboratory Technical Report UCAM-CL-TR-651

PhD dissertation. Presents Lingua Franca, a system enabling the user to manipulate a program via multiple heterogeneous languages. The initial application area is end-user programming for home networks.

Hague, R, Robinson, P., and Blackwell, A.F. (2003). Toward End-User Programming for Ubiquitous Computing (poster) In Adjunct Proceedings of UbiComp 2003 (Fifth International Conference on Ubiquitous Computing).

Presents initial results of work on the multi-language end-user programming system Lingua Franca, above.

Blackwell, A.F. and Hague, R. (2001). AutoHAN: An Architecture for Programming the Home In Proceedings of the IEEE Symposia on Human-Centric Computing Languages and Environments, pp. 150-157.

Discusses the issues involved with End-User Programming in a domestic environment, and proposes an architecture for multiple scripting languages suited to this environment, focusing on the Media Cubes tangible programming language.

Blackwell, A.F. and Hague, R. (2001). Designing a Programming Language for Home Automation In G. Kadoda (Ed.) Proceedings of the 13th Annual Workshop of the Psychology of Programming Interest Group (PPIG 2001), 85-103.

Examines the issues surrounding language design in the context of domestic ubiquitous computing. The paper discusses the development of two languages; Iota.HAN, a systems programming language with a strong theoretical foundation, and the Media Cubes language.

European Patent EP1136904: Method of and apparatus for actuating an operation

One of three designated inventors on the above patent, pertaining to a result of the Sentient Computing project. The patent is owned by AT&T Laboratories Cambridge.

Technical Skills & Experience Summary

- Extensive knowledge of and experience with C++, Java, Python and Tcl, and the Swing user interface toolkit
- Familiarity with numerous other programming languages, including Perl, JavaScript, Objective-C, Emacs Lisp and Standard ML
- Familiarity with both Unix and Windows environments
- Experience in designing, implementing and maintaining significant areas of functionality in a leading EDA tool
- Research experience in both academic and commercial R&D settings, including publishing papers and presenting results at conferences

Additional Information

- Personal web site, <http://www.rho.org.uk>, including a blog, and various software projects:
 - SilverService, a Mac OS X utility to make Unix shell commands available in GUI applications
 - Bookaroo, an online booking system for small-group teaching
 - UnityWiki, a web-based system focused on small group collaboration
- Prior First Aid at Work qualification (Lapsed December 2002)
- Full, clean UK driving license

References

Available on request