

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

February 2011 – Present

Lead Engineer, Azuro (UK) Ltd

January 2007 – February 2011

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.

Since May 2010: Team Lead of the Core team, covering the areas of the codebase described above. Responsible for day-to-day supervision of two other developers, management of bugs and enhancements, and involvement in planning for future releases.

Azuro was acquired by Cadence Design Systems in July 2011

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.

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
- Good knowledge of numerous other programming languages, including Perl, JavaScript, Objective-C, Emacs Lisp and Standard ML
- Familiarity with both Unix and Windows environments, including extensive use of standard Unix shells and tools
- Experience in designing, implementing and maintaining significant areas of functionality in a leading EDA tool
- Experience in leading a small development team within an R&D organisation, managing bug requests and work items, and being involved in the discussion and implementation of release plans.
- Research experience in both academic and commercial R&D settings, including publishing papers and presenting results at conferences

Additional Information

- Personal web site, <http://rob.rho.org.uk>, including a blog, and various software projects
- Full, clean UK driving license

References

Available on request