

Dr Jonathan Mark Stott

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Education

2003 – 2009: University of Kent, Canterbury

- Doctor of Philosophy in Computer Science. Thesis titled *Automatic layout of metro maps using multicriteria optimisation*. Graduated in July 2009.

1999 – 2003: University of Kent, Canterbury

- B.Sc., Computer Science with a Year in Industry. First Class (Honours).

1991 – 1998: Wilnecote High School, Tamworth, Staffordshire

- A Levels: Maths (B), Physics (C), Further Maths (C), Music (C), General Studies (B).
- 10 GCSE passes including English, Maths and Science: 1 A*, 8 As, 2 Cs.

Employment

May 2007 – present: Development Team Leader, Axon Ltd., Southampton

- Responsible for a small team of developers building healthcare-related web-based systems using the Grails web framework.
- I was involved in the company from its inception and therefore took charge of introducing development practices (including adopting an adaptation of the Scrum agile methodology, version control system, issue-tracking, processes, coding standards, tools choices).
- I adapted the processes as business requirements changed, for example when a significant proportion of our development was off-shored to India. I established the case for bringing development back to the UK.
- I made critical decisions on technology choices, including adopting Grails as a web framework in 2008. I have pushed architecture changes where a business case was evident. I am constantly on the lookout for ways to improve productivity and the effectiveness of the development team.
- I was responsible for introducing security policies in order to be compliant with requirements set out by NHS Connecting for Health.
- I interact with customers in establishing their requirements and evaluating the products that we build for them.
- I always ensured that I was one step ahead of the rest of the team and became the subject matter expert for advice on resolving problems or the best way to write code or design a system.
- I am currently working on making our software massively scalable.

Nov 2006 – May 2007: Research Associate, University of Kent, Canterbury

- Six-month contract funded by Axon Ltd. which led directly to my current employment.

Jan 2006 – Nov 2006: Web Programmer, University of Kent, Canterbury

- I was a member of the university's Webteam and worked on the development and maintenance of internal websites using PHP and MySQL.

2003 – 2006: Sessional Teacher, University of Kent, Canterbury

- I led seminars and terminal sessions on a number of undergraduate computer science courses including object-oriented programming with Java and algorithms, data structures and complexity.
- I also taught on the postgraduate Object-Oriented Software Engineering course and undertook revision sessions for undergraduates.

2001 – 2002: Trainee Software Engineer, IBM UK Ltd., Hursley, Hampshire

- I worked as a member of the development team for the CICS Transaction Gateway product for the year in industry part of my degree.
- I had to very quickly learn new skills and had to touch on aspects of C, C++, HP-UX, Solaris, AIX, z/OS, Rexx and even Cobol.

- I completed training on advanced Java programming, CICS fundamentals and an introduction to C.
- I was involved in extra-curricular activities including schools liaison and organising a team of fellow placement students to take part in a programming competition against other IBMers (we didn't come last!).

1998 – 1999: Stock Control Assistant, UCI Logistics Ltd., Tamworth, Staffordshire

- Mainly involved in looking after stock control for a warehouse handling 10,000 pallets.
- Using my own initiative, I identified ways to improve warehouse productivity and accuracy, including making significant modifications to an existing MS Access system to support the changes.

Skills, Experience and Qualities

- I flourish in challenging environments and enjoy the intellectual stimulation of solving problems. I am always on the lookout for anything that improves the quality of existing solutions or new ideas that will bring benefits to a business. I value the *right* solution, be it the quickest, cheapest, most elegant or some combination of the three.
- I enjoy learning new things and sharing my knowledge.
- I am dedicated and commit myself wholly to my work.
- I am passionate about computers and technology – I wrote my first code when I was 6.
- I have expert knowledge of Java, Grails, Groovy, XHTML, CSS, SQL, XML, Tomcat, Linux and Subversion.
- I have good knowledge of Spring, Hibernate, JavaScript and web services.
- I am able to quickly adapt to new technologies as required and have in the past worked with C, C++, Perl and PHP.
- I ran a popular science-based website called tcaep.co.uk from 1997 before selling it to the Institute of Physics in 2001.
- I need to be at the leading edge of technologies: I was one of the first people to be involved in Google Maps mash-ups, and currently run earthtools.org.
- I undertook the technical edit of *IRC Hacks* by Paul Mutton (published by O'Reilly).

Publications

- J. M. Stott, P. J. Rodgers, J. C. Martinez-Ovando, S. G. Walker. Automatic metro map layout using multicriteria optimization. *IEEE Transactions on Visualization and Computer Graphics*. To appear. 2010.
- J. M. Stott. *Automatic Layout of Metro Maps Using Multicriteria Optimisation*. Ph.D. thesis. Computing laboratory, University of Kent. October 2008.
- H. Li, M. C. Price, J. M. Stott, I. W. Marshall. The development of a wireless sensor network sensing node utilising adaptive self-diagnostics. *Self-Organising Systems*. LNCS Vol. 4725, pp. 30-43. Springer-Verlag. 2007.
- J. M. Stott, P. Rodgers. Automatic metro map design techniques. In *Proceedings of the 22nd International Cartographic Conference*. International Cartographic Association. A Coruña, Spain. July 2005.
- J. M. Stott, P. Rodgers, R. Burkhard, M. Meier, M. Smis. Automatic layout of project plans using a metro map Metaphor. In *Proceedings of the 9th International Conference on Information Visualisation (IV05)*. IEEE. London. July 2005.
- R. Burkhard, M. Meier, P. Rodgers, M. Smis, J. Stott. Knowledge visualization: a comparative study between project tube maps and Gantt charts. In *Proceedings of the 5th International Conference on Knowledge Management (I-KNOW 2005)*, pp. 388-395. Graz, Austria. June 2005.
- J. M. Stott, P. Rodgers. Metro map layout using multicriteria optimisation. In *Proceedings of the 8th International Conference on Information Visualisation (IV04)*, pp. 355-362. IEEE. London. July 2004.

Interests

I play the trumpet; I enjoy photography and have had some of my photos published; I have actively engaged in charity work with the National Trust and Tamworth Talking Newspaper for the Blind (for which I won a “Local Heroes” award).