DANIEL FITTON
CURRICULUM VITAE

PERSONAL

Full Name:	Dr. Daniel Bowen Fitton
Date of Birth:	24/06/1980
Nationality:	British

CONTACT

Address:	-
	-
Mobile Tel:	-
E-mail:	dan <at> dan-f <dot> co <dot> uk
Web:	www.dan-f.co.uk

EDUCATION

2001-2007	Computing Department, Lancaster University, Lancaster. PhD: "Exploring the Design, Deployment and Use of Hermes: A System of Situated Digital Interactive Office Door Displays".
2004-2005	Centre for Enhanced Learning and Teaching, Lancaster University, Lancaster Certificate in Learning & Teaching in Higher Education (CiLTHE)
1998-2001	Lancaster University, Lancaster. BSc: Computer Science, 1st Class honours.
1996-1998	King George V College, Southport. A-Level: Computing, Chemistry, Physics

PREVIOUS EMPLOYMENT

2007–Current	Computing Department, Lancaster University. Senior Research Associate, EPSRC Project 'NEMO: Networked Embedded Models and Memories of Physical Work Activity' (Code EP/C014677/1)
2004-2007	Computing Department, Lancaster University. Research Associate, EPSRC Project 'CASIDE: Investigating Cooperative Applications in Situated Display Environments' (Code EP/C005589/1)
2003-2004	Computing Department, Lancaster University. Research Associate, EPSRC IRC Project 'EQUATOR – Technological Innovation in Physical and Digital Life (Code GR/N15986/01)
1999-2000	Information System Services, Lancaster University, Lancaster. Network Technician.
1999	British Telecoms Labs, Adastral Park, Ipswich. Student Internship.

AWARDS

Community Prize, Awarded for work on the SPAM (SMS Public Asynchronous Messenger) system on the EQUATOR project, Lancaster University (2003).

Best Paper Award, 3rd IEEE European Conference on Smart Sensing and Context (EuroSSC), Zurich, Switzerland (2008).

TECHNICAL SKILLS

Programming languages:	Java (Java 2, J2EE/Servlets, Networking/RMI, Jini, J2ME/MIDP, JSR-82, mobile devices), Google Android, C, C++, Pascal, Delphi, SQL, Scheme, Visual Basic, PHP and Javascript/HTML.
Systems:	Experience of installation, configuration and maintenance of servers (including Windows Advanced Server, BSD and Linux/LAMP), web servers (IIS, Apache and Apache Tomcat) and MySQL. Extensive Linux experience on a wide range of distributions (including Slackware, Redhat, Gentoo, Debian, Ubuntu, Mandrake and Familiar) and the configuration of diskless Linux remote boot systems. Embedded ARM and PIC systems.
Additional Experience:	Embedded C (ARM and PIC), Bluetooth programming, 802.15.4, X10, GSM/GPRS, SMS, MMS, SMIL, Serial port programming, Timex iButtons, SMT Soldering, Electronics, Linux on iPAQ, high-power IEEE802.3af and extensive experience working and developing with mobile devices (phones and PDAs).

RESEARCH INTERESTS

My interests primarily involve the investigation of new and novel Human-Computer Interaction issues in the context of ubiquitous computing systems. Central to my work is the combination of technical development of prototypical ubiquitous system with the exploration of emerging HCI and social issues (through user-studies or longer-term 'real world' deployments) to help foster user-centred design. My research interests also include the application of embedded systems and mobile devices to enable new applications and solve problems in domestic and workplace/industrial scenarios.

RESEARCH PROFILE

During my PhD I designed and deployment of a system of 10 small interactive public display appliances in the Computing Department at Lancaster University. These were available for public usage and provided asynchronous messaging and context sharing services. The aim of this work was to understand how such a system can support awareness and explore the affordances provided ubiquitous public displays. This work formed the basis of my PhD thesis and led to numerous international conference publications, book chapters and journal articles. I also designed and developed a system known as SPAM (SMS Public Asynchronous Messenger) system for which I was awarded a community prize. SPAM provides asynchronous messaging services between mobile phones and interactive displays and was deployed for uses by the carers of former psychiatric patients. The research aim of this work was to explore how interactive displays can support a sense of community through enabling awareness and coordination with the prototypes acting as technology probes. This work also resulted in a large number of high quality research publications. In both of these systems a combination of rapid prototyping and user-centred design was used to enable adoption and respond to emerging user requirements,

After my PhD I was chiefly responsible for the design, construction and deployment of the Hermes 2 system of 40 interactive digital displays (located in the InfoLab21 building at Lancaster). This was one aspect of my work on the EPSRC CASIDE project which explored the key areas of understanding of settings/communities, exploration of interaction and use, and prolonged deployments all in the context of situated digital displays. Hermes 2 is one of the largest display-based ubiquitous computing test beds to date and the work followed on from the success of the original Hermes system. Working on this project has also involved supervising and managing the implementation of my hardware and software designs, including coordination with a range of stakeholders, suppliers and manufacturers. My work resulted in a large number of publications and research involving the system is ongoing.

In my current work on the EPSRC NEMO project I explore the application of smart objects (everyday objects augmented with sensing, processing, storage and communication) in order to provide a platform to enable new applications for use primarily for use in industry. In addition to developing advanced techniques for providing context awareness I am also exploring user interaction with smart objects from mobile devices.

My work has also included applying artificial intelligence to enable automation in a context aware office, investigating the use of situated displays support small communities and investigating messaging in the home. I have also been involved the organisation of workshops such as PERMID (Pervasive Mobile Interaction Devices) and on the program committee of HuCuBis (International Workshop on Human Control of Ubiquitous Systems), IADIS (Interfaces and Human Computer Interaction) and EuroSSC (European Conference on Smart Sensing and Context). In addition to reviewing papers, I have also been invited to review books on topics such as technical issues of programming with Bluetooth and Human-Computer Interaction.

TEACHING PROFILE

I consider teaching to be a very important and rewarding part of my work and I have successfully completed stage 1 of the CiLTHE/CAP (Certificate in Learning and Teaching in Higher Education/postgraduate Certificate in Academic Practice), an accredited qualification for teaching in higher education. I have planned and delivered tutorial/seminar sessions on a diverse range of programming and computer science topics for undergraduate students (from object oriented programming concepts to computer architecture), in addition to having supervised numerous practical sessions teaching programming languages. Since 2005 I have taken a key role in delivering a courses that provides a computing component for MSc programs run by the Management School at Lancaster. This involved planning course content, structure and assessment in addition to preparing and delivering lectures up to 3 hours in length. I have also prepared and delivered lectures on undergraduate BSc program modules on various topics, including responsibility for planning, delivering and assessing an entire core module on assembly language programming. I have also been involved in the supervision and technical direction of numerous undergraduate and MSc students.

PUBLICATIONS

Books/Book Chapters

Fitton, D.: "Exploring the Design, Deployment and Use of Hermes: A System of Situated Digital Interactive Office Door Displays", VDM Verlag, ISBN 3-6391-2403-0, 2009

Cheverst, K., **Fitton, D.**, Rouncefield,M.: "Investigating the use of Remote Messaging in Community Care", in: Inside Text: social perspectives on SMS in the mobile age. R. Harper (Ed) Springer-Verlag, London Ltd. 2004

Cheverst, K., **Fitton, D**., Dix, A.: "Exploring the Evolution of Office Door Displays", in: Public and Situated Displays: Social and Interactional aspects of shared display technologies. K. O'Hara, M. Perry, et al (Eds). Chapter 6, pp. 141-169, Kluwer. ISBN 1-4020-1677-8. 2003

Cheverst, K., Dix, A., **Fitton, D**., Graham, C., Rouncefield, M. Situatedness of Awareness Information: impact on the design and usage of awareness systems, in: Awareness Systems: Advances in theory, methodology and design. Springer HCI Series – Eds: Panos Markopoulos and Boris de Ruyter, Chapter 17, Springer (Available: June 2009)

Journal Publication

Fitton, D., Cheverst, K., Kray, C., Dix, A., Rouncefield, M., Saslis-Lagoudakis, G.: Rapid Prototyping and User-centred Design of Interactive Display-based Systems. IEEE Pervasive Computing 4 (2005) 58-66

Crabtree, A., French, A., Greenhalgh, C., Benford, S., Cheverst, K., **Fitton, D**., Rouncefield, M., Graham, C.: Developing Digital Records: Early Experiences of Record and Replay. Computer Supported Cooperative Work 15(4): 281-319 (2006)

Cheverst, K., Byun, H., **Fitton, D**., Sas, C., Kray, C., Villar, N.,: Exploring Issues of User Model Transparency and Proactive Behaviour in an Office Environment Control System. User Model. User-Adapt. Interact. 15(3-4): 235-273 (2005)

Cheverst, K., Dix, A., Graham, C., **Fitton, D**., Rouncefield, M."Exploring Awareness Related Messaging through Two Situated Display based Systems", in Special Issue of Human-Computer Interaction, Volume 22, Number 1-2. pp. 173-220. (2007).

Conference Publication

Cheverst, K., Clarke, K., **Fitton, D**., Rouncefield, M., Crabtree, A., Hemmings, T.: SPAM on the menu: the practical use of remote messaging in community care. Proceedings of the Conference on Universal Usability (CUU '03). Vancouver, British Columbia, Canada (2003) 23 - 29

Cheverst, K., Dix, A., **Fitton, D**., Friday, A., Rouncefield, M.: Exploring the Utility of Remote Messaging and Situated Office Door Displays. Proceedings of Human Computer Interaction with Mobile Devices and Services (MobileHCI '03). Udine, Italy (2003) 336-341

Clarke, K., Cheverst, K., Dewsbury, G., **Fitton, D**., Hemmings, T., Hughes, J., Rodden, T., Rouncefield M., Sommerville, I. "Cultural Probes: Eliciting requirements for Dependable Ubiquitous Computing in the Home", to appear in HCI International Conf (2003).

Cheverst, K. **, Fitton, D**. , Dix, A. , and Rouncefield, M. "Exploring the use of Remote Messaging and Situated Displays", In Proc of Fifth International Symposium on Human Computer Interaction with Mobile Devices and Services MobileHCI '03. (2003)

Fitton, D., Cheverst, K.: Experiences Managing and Maintaining a Collection of Interactive Office Door Displays. Proceedings of the European Symposium on Ambient Intelligence (EUSAI '03). Eindhoven, The Netherlands (2003) 394-409

Cheverst, K., Dix, A., **Fitton, D**., Rouncefield, M.: 'Out To Lunch': Exploring the Sharing of Personal Context through Office Door Displays. Proceedings of the Australasian Computer-Human Interaction Conference (OzCHI '03), Brisbane, Australia (2003) 74-83

Clarke, K., Cheverst, K., Dewsbury, G**., Fitton, D**., Hemmings, T., Hughes, J., Rodden, T., Rouncefield, M., Sommerville, I., "Cultural Probes: Eliciting requirements for Dependable Ubiquitous Computing in the Home" OZCHI '03 (2003).

Graham, C., K. Cheverst**, D. Fitton**, and M. Rouncefield, "How Do You Turn A Duck Into A Soul Singer? Put It In The Microwave Until Its Bill Withers": Some social features of a simple technology", in proceedings of the 1st International Forum on Less is More - Simple Computing in an Age of Complexity, April 2005.

Cheverst, K., Dix, A., **Fitton, D**., Kray, C., Rouncefield, M., Sas, S., Saslis-Lagoudakis, G., Sheridan, J.: Exploring bluetooth based mobile phone interaction with the hermes photo display. Mobile HCI 2005: 47-54

Kray, C., Cheverst, K**., Fitton, D**., Sas, C., Patterson, J., Rouncefield M., Stahl, C. "Sharing control of dispersed situated displays between nand residential users", in proceedings of the 8th International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI '06), September 2006.

Saslis-Lagoudakis, G., Cheverst, K., Dix, A., **Fitton, D**., and Rouncefield, M., "Hermes@Home: Supporting Awareness and Intimacy between Distant Family Members", in proceedings of International Conference of the Australian Computer-Human Interaction Special Interest Group (OzCHI'06), November 2006.

Taylor, N., Cheverst, K., Dix, A., Race, N. **Fitton D**., Rouncefield, M. and Graham, C. "Probing Communities: Study of a Village Photo Display", to appear in proceedings of International Conference of the Australian Computer-Human Interaction Special Interest Group OzCHI '07, (2007)

Fitton, D., Sundramoorthy, V., Kortuem, G., Brown, J., Efstratiou, C., Finney, J., and Davies, N. 2008. Exploring the Design of Pay-Per-Use Objects in the Construction Domain. In Proceedings of the 3rd European Conference on Smart Sensing and Context, 192-205, October 2008

Workshop Publications

Cheverst, K., **Fitton, D**., Dix, A., Rouncefield, M.: Exploring Situated Interaction with Ubiquitous Office Door Displays. Proceedings of the Workshop on Situated Interaction at CSCW '02, New Orleans, USA (2002)

Cheverst, K., Dewsbury, G., **Fitton, D**., Rouncefield, M. "'Getting the Message': SMS Messaging and Community Care" Proc. of Equator Workshop. Southhampton (2002).

Fitton, D., Cheverst, K., J, F., Dix, A.: Supporting Interaction with Office Door Displays. Proceedings of the Workshop on Multi-User and Ubiquitous User Interfaces (MU3I) at IUI/CADUI, Madeira (2004) 19-23

Fitton, D., Cheverst, K., Rouncefield, M., Dix, A.: Probing Technology with Technology Probes. Equator – Record and Reuse Workshop, London (2004)

Dix, A., Cheverst, K., **Fitton, D**., Friday, A.: The Auditability of Public Space - Approaching Security Through Social Visibility. Proceedings of the 2nd UK-UbiNet Workshop, Security, Trust, Privacy and Theory for Ubiquitous Computing, Cambridge, UK (2004)

Cheverst, K., Dix, A., **Fitton, D**., Kray, C., Rouncefield, M., Sas, S., Saslis-Lagoudakis, G., Sheridan, J.: Exploring Mobile Phone Interaction with Situated Displays. PERMID 2005: 43-47

Cheverst, K., A. Dix, **D. Fitton**, C. Graham, C. Kray, M. Rouncefield, G. Saslis-Lagoudakis, (2005). "Probing Designs: Designing Probes.", in proceedings of the international workshop on Appropriate Methods for Design in Complex and Sensitive Settings at OzCHI 2005. November 2005.

Saslis-Lagoudakis G., Cheverst, K., **Fitton, D**.:"Hermes@Home: Keeping in Touch with the Home", in proceedings of 9th Human Centred Technology Workshop, University of Sussex, September 2006.

Fitton, D. Cheverst, K. M. Rouncefield and Dix,A. "Exploring Adoption in the Hermes Door Display Deployment", in proceedings of 1st International Workshop on Ubicomp in the Office, Ubicomp 2007. (2007)

Technical Reports

Cheverst, K., Clarke, K., Dewsbury, G**., Fitton, D**., Hemmings T., Rouncefield, M. "When Geography Matters - Location Awareness and Community Care"- Technical Report Equator-02-046 (2002)