

chris@mungbean.net  
www.chrishand.net  
www.linkedin.com/in/chrishanduk  
+44 (0)7813 179736

# Chris Hand. Curriculum Vitæ

## Summary

Technologist, designer and lecturer with 14 years experience in Higher Education. Building on a broad interdisciplinary base of interaction design, prototyping, hacking, digital media, teaching and research.

## Education

- 2005-2007 **MA Design Interactions**, Royal College of Art, London.
- 2001-2002 **Advanced Certificate in Art & Design** (Foundation),  
Telford College, Edinburgh.
- 1984-1987 **BSc (Hons) Computer Engineering** (2/i),  
University of Manchester.

## Employment

- Mar 2008- **Lecturer, Design**  
School of Arts & Creative Industries, Edinburgh Napier University  
Programme Leader for MDes Interaction Design and MDes Interdisciplinary Design. Project supervision and teaching interaction design, prototyping and interactive media on postgraduate and undergraduate programmes. Research interests: Open Source for Design and Production, Design Fiction, Hybrid/Transdisciplinary Design Practice.
- Aug 2007- **Freelance Interaction Designer**  
Specialising in ubiquitous and physical interaction, prototyping experimental and critical designs, running workshops and hack-labs. Clients include Intel and Dunne & Raby. Visiting positions include Electronics Tutor at Royal College of Art, Lecturer at University of Edinburgh and Design Researcher at Copenhagen Institute of Interaction Design.
- 2003-2005 **Lecturer, Interactive Media Design**  
School of Design/Division of Applied Computing, University of Dundee.  
Developing and delivering new 4-year interdisciplinary BSc Interactive Media Design, leading modules in physical computing and sensor-based interaction.
- 2000-2003 **Freelance Digital Media Producer/Lecturer/Consultant**  
Various short-term contracts including Lecturer in Multimedia and Web Development (FTMS-DMU Kuala Lumpur, Malaysia), Technical Editor and Digital Media Producer.
- 1998-2000 **Lecturer, Computer Science**  
School of Computing, Napier University, Edinburgh  
Full-time lecturer in HCI research group, teaching Digital Media, HCI, Virtual Environments.
- 1990-1998 **Lecturer/Senior Lecturer, Computer Science**  
School of Computing Sciences, De Montfort University, Leicester
- 1987-1990 **Software Design Engineer**  
Marconi Instruments Ltd (ATE Division), St Albans, Herts.  
C/UNIX software development for Automatic Test Equipment.

## Technical Skills

Programming and Web Development	Key: HTML/XHTML, CSS, PHP, MySQL, JavaScript, Processing, Python. Also: Max/MSP, Pure Data, C, csh, Java, VRML, JSP, XML, XSL, Pascal, PostScript, BASIC, Assembler, Lisp, Prolog. Novice iPhone developer.
Video, Graphics Print and CAD	Final Cut Pro, Premiere, After Effects, Photoshop, Illustrator, InDesign, Dreamweaver, Rhino3D, QuarkXPress.
Audio/Music Production	Ableton Live, Traktor, Soundtrack, Audacity, SoundForge, Reason, ReCycle, Fruity Loops, Acid.
Hardware	Arduino, PIC and Basic Stamp microcontrollers, analogue and digital electronics design, sensors. PC architecture, networking. Audio engineering.
OS/Admin	Unix/Linux, Mac OS X, Apache and Tomcat web servers, TCP/IP networking, Unix shell scripting <i>etc.</i> Wordpress, Google analytics & webmaster tools, SEO.
Productivity	Emacs, vi, Word, Powerpoint, Excel.

## Recent Exhibitions

- 2009 **The Power of 8**. Watermans gallery, Brentford. 22 Sep – 11 Oct 2009. With Anab Jain/Superflux.
- 2009 **Interiors Birmingham**, National Exhibition Centre. 18-21 Jan 2009. With DesignersBlock and KithKin.
- 2008 **Wouldn't It Be Nice...** Somerset House, London, 17 Sep - 7 Dec 2008. With Dunne & Raby and Michael Anastassiades.
- 2008 **SomeRightsReserved** at Pulse, Earl's Court London, 1-3 June 2008.
- 2008 **KithKin at DesignersBlock**, Piscina Argelati, Salone Internazionale del Mobile, Milan. 16-21 April 2008.  
  
Plus **SomeRightsReserved** (online): download-only design shop.
- 2008 **Design and the Elastic Mind**, MoMA, New York, 24 Feb - 12 May 2008. With Dunne & Raby and Michael Anastassiades.
- 2008 **Wouldn't It Be Nice... 10 Utopias In Art And Design**, Museum für Gestaltung, Zürich, 8 Feb - 25 May 2008. With Dunne & Raby and Michael Anastassiades.
- 2007 **TULCA 2007**, Galway, Ireland, 9-25 Nov 2007. With Ceára Conway.
- 2007 **Wouldn't It Be Nice... 10 Utopias In Art And Design**, Centre D'Art Contemporain, Geneva, 25 Oct - 16 Dec 2007. With Dunne & Raby and Michael Anastassiades.
- 2007 **The Great Exhibition**, Royal College Of Art, London, 15-28 Jun 2007.
- 2006 **Generation/Show 2**, Royal College Of Art, London, 23 Jun - 2 Jul 2006. With Robert Philips.
- 2005 **Electro-Acoustic Walkway**. Big In Falkirk Street Arts Festival, Falkirk, 20 April - 1 May 2005. With Rick Bamford.

## Recent Workshops and Invited Talks

### **Hacking, Sketching, Sensors & Switches.**

Invited lecture and workshop for postgraduate students.  
School of Arts, Culture and Environment, **University of Edinburgh**.  
27-28 January 2010.

### **Kits, Fanufacture and *ad hoc* DIY.**

Invited talk at Alcatel-Lucent Bell Labs, Antwerp, Belgium. 3 December 2009.

### **Interaction Design, Sketching in Hardware, and Sniffing Glue.**

Invited talk at Glasgow School of Art, 2 October 2009.

### **Distributed Fanufacture and the Arduinome Experience**

Talk at **Sketching in Hardware 2009**, invitation-only international hardware hacking summit. UCL, London. 17-19 July 2009.

### **Interaction Design Workshop**

Invited Atelier Leader for 6-day design workshop for students from Rijeka, Split, Zadar and Zagreb. **University of Split**, Croatia. 23-28 March 2009.

### **Teaching Interaction Design?**

Invited talk at **Interaction Design Symposium 2009**, University of Split, Croatia. 19-20 March 2009.

### **Hacking Sensor Interfaces and Introduction to Arduino**

Invited lecture and workshop for postgraduate students.  
School of Arts, Culture and Environment, **University of Edinburgh**.  
24-25 January 2008 and 29-30 January 2009.

### **Embodiment and the Everyday**

Invited presentation for Socio-Digital Systems Group, **Microsoft Research Lab Cambridge**, 19 February 2007.

### **DIY Hacks for iCubeX and Max**

Invited lecture and workshop for postgraduate students.  
School of Arts, Culture and Environment, **University of Edinburgh**, Jan 2005.

## Professional Membership & Activities

- 2009- Member, Design Research Society
- 2009- **This happened Edinburgh**. Co-organiser and co-curator of series of Interaction Design talks and networking events. [www.thishappened.org](http://www.thishappened.org)
- 2009- Member, **Council** – International Think-tank/Consultancy for The Internet Of Things [www.theinternetofthings.eu](http://www.theinternetofthings.eu)
- 1996- **MBCS** - Member, British Computer Society
- 1996- **CEng** - Chartered Engineer, Engineering Council
- 1996-2000 Member, BCS HCI Specialist Group
- 1996-1998 Committee member, BCS Leicester Branch
- 1993-2000 Co-founder member, UK Virtual Reality Special Interest Group (UK VR-SIG)

## Languages Spoken

- 2008-2009 *Japanese 1, courses 1-3*. CEF: A1. Institute for Advanced Language Studies, University of Edinburgh. Evening classes, beginners level.
- 2001 *GfdS Diplom Deutsch als Fremdsprache, Grundstufe 2* (Diploma in German as a Foreign Language). CEF: B1. Grade B. Full-time 2-month language course, d.i.d deutsch-institut, Berlin.
- 1999-2000 *Conversational Spanish*. Institute for Advanced Language Studies, University of Edinburgh. Evening classes, post-beginners level.
- 1988-1990 *GCE A-level French*. Grade A/A. Oaklands College, St Albans, Herts. Evening classes over 2 years.
- Native English speaker.

## Research Publications

### Books and Book Chapters

- Hand, C (ed). *Proceedings of the 3rd UK VR-SIG Conference*. De Montfort University, 3rd July 1996. (ISBN 1-857-21216-9)
- Hand, C. "Terrain Modelling in Virtual Worlds" in Robin Hollands, *The Virtual Reality Homebrewer's Handbook*. John Wiley & Sons, June 1996 (ISBN 0-471-95871-9)
- Hand, C. "Other Faces of Virtual Reality". In P. Brusilovsky, P. Kommers and N. Streitz (eds.): *Multimedia, Hypermedia and Virtual Reality: Models, Systems, and Applications*. Berlin: Springer-Verlag, 1996. Lecture Notes in Computer Science Vol. 1077. pp107-116. (ISBN 3-540-61282-3)

### Journal Papers

- Hand, C. "Electronic Devices as Design Exploration". Keho/Peach FP6 Coordination Action on Presence. Issue 2 (Autumn 2007), pp12-14.
- Deol, K. K., Steed, A., Hand, C., Istance, H. and Tromp, J. "Usability Evaluation for Virtual Environments: Methods, Results and Future Directions" (part 2). *Interfaces* No 44 (Autumn 2000), pp4-7.
- Deol, K. K., Steed, A., Hand, C., Istance, H. and Tromp, J. "Usability Evaluation for Virtual Environments: Methods, Results and Future Directions" (part 1). *Interfaces* No 43 (Summer 2000), pp4-8.
- Graves, A., Hand, C. and Hugill, A. "MidiVisualiser: interactive music visualisation using VRML". *Organised Sound* 4(1):15-23. Cambridge University Press. (1999)
- Hand, C., Lingard, S. and Skipper, M. "A Collaborative Environment for Role-Playing in Object Space". *Virtual Reality: Research, Development and Application*, 3(1) :49-58. (1998)
- Hand, C. "A Survey of 3D Interaction Techniques". *Computer Graphics Forum*, 16(5): 269-281. (Dec 1997)

### Conference Papers

- Hand, C., Jain, A., Britton, T., Burnett, G., Collett, C., Chen, D., Sharma, S., Tims, C. and Young, L. "The Power of 8: Encouraging Collaborative DIY Futures". *Negotiating Futures - Design Fiction*, 6th Swiss Design Network Conference, Basel, Switzerland, 28-30 October 2010.
- Hand, C., Mitrović, I. and Smyth, M. "Finding Common Ground: Interdisciplinary Workshops for Interaction Design Education". *Borderline - Cumulus Conference*, Media & Design Academy, Genk, Belgium, 26-29 May 2010.
- Coleman, G. W., Hand, C., Macaulay, C. and Newell, A. F. "Approaches to Auditory Interface Design - Lessons from Computer Games". *Proceedings of ICAD 05 - Eleventh Meeting of the International Conference on Auditory Display*, Limerick, Ireland, July 6-9, 2005.
- Hand, C. and Fox, C. "Reflections on the Design Of ToeTapper, a Foot-Operated System for Musical Performance and Composition". *Proceedings of Include 2005: International Conference on Inclusive Design*, Royal College of Art, London, April 5-8, 2005. (ISBN: 1-905000-10-3)

- Surman, P., Sexton, I. and Hand, C. "Autostereo 3D-TV with Head Tracking". in *Proceedings of Electronic Information Displays (EID 2000)*, ExCeL, London, November 21-23, 2000.
- Graham, M., Kennedy, J. B. and Hand, C. "A Comparison of Set-Based and Graph-Based Visualisations of Overlapping Classification Hierarchies". *International Working Conference on Advanced Visual Interfaces (AVI 2000)*, Palermo, Italy, May 24-26, 2000. pp41-50. ACM Press: 2000.
- Graham, M., Kennedy, J. B. and Hand, C. "The Challenge of Visualising Multiple Overlapping Classification Hierarchies". In *Proceedings of User Interfaces to Data Intensive Systems (UIDIS'99)*, Edinburgh, Scotland, 5-6 September, 1999. IEEE Computer Society: Los Alamitos, CA, 1999. pp42-51.
- Hand, C. "Mixed Arcadian Reality: Exploiting Synergies Between the Real and the Virtual". *Workshop on Arcadian Virtuality - Ecological Information Spaces*, at i3 Spring Days Conference, Sitges, Spain, 7-10 March 1999.
- Istance, H. and Hand, C. "Individual Differences in Navigating Virtual Environments: Navigation Aids in Perspective". In *Proceedings of First International Workshop on Usability Evaluation for Virtual Environments (UEVE'98)*, De Montfort University, Leicester, 17th December 1998. pp65-68.
- Kaur, K., Tromp, J., Hand, C., Istance, H. and Steed, A. "Usability Evaluation for Virtual Environments". In *Proceedings of First International Workshop on Usability Evaluation for Virtual Environments (UEVE'98)*, De Montfort University, Leicester, 17th December 1998. pp1-5.
- Tromp, J., Kaur, K., Hand, C., Istance, H. and Steed, A. "Usability for VR Interfaces" in *Proceedings of Collaborative Virtual Environments 1998*, 17-19th June 1998, Manchester, UK. p31.
- Graves, A., Hand, C. and Hugill, A. "Interactive Visualisation of Musical Form Using VRML". in *Proceedings of the Fourth UK VR-SIG Conference*, R Bowden (Ed), 1st Nov 1997, Brunel University, UK, pp 98-109.
- Edwards, J. and Hand, C. "MaPS: Movement and Planning Support for Navigation in an Immersive VRML Browser" *Proceedings of The Second Annual Symposium on the Virtual Reality Modeling Language (VRML '97)*, Monterey, California, USA, February 24-26, 1997. ACM: New York. pp65-73.
- Callaghan, M. and Hand, C. "Presentation and Representation of Implicit Knowledge in the World Wide Web". *Workshop on Knowledge Media for Improving Organizational Expertise - Impacts of new methods and enabling technologies*, at International Conference on Practical Aspects of Knowledge Management, Basel, Switzerland, 30-31 October 1996.
- Hand, C. and Skipper, M. "A Collaborative Environment for Role-Playing in Object Space". *Proceedings of Collaborative Virtual Environments 1996*, University of Nottingham, UK. 19-20th September 1996.
- Hand, C. "Some User Interface Issues for Hypermedia Virtual Environments". Position paper for *Workshop on Virtual Environments and the WWW*, Fifth International World-Wide Web Conference, Paris, France, 6-10 May 1996.
- Hand, C. "Creating hypermedia documents by doing: an alternative to authoring". *IEE Colloquium on The Authoring and Application of Hypermedia-Based User Interfaces*, London, 14th November 1995. Digest No: 95/202. pp3/1-3/3.
- Hand, C., Skipper, M. and Dinsdale, A. "Collaborative Object-Oriented Design using Role-Playing in Shared Virtual Spaces". *Proceedings of the 4D Dynamics Conference*, De Montfort University, Leicester. September 21 1995. pp 59-62.
- Skipper, M. and Hand, C. "TaTTOO'95 On-Line: A Report". In *Proceedings of TaTTOO'95: Teaching and Training in the Technology of Objects*. De Montfort University, Leicester, UK. January 4-6 1995.

Hand, C. "Other Faces of Virtual Reality". *Proceedings of the East-West International Conference on Multimedia, Hypermedia and Virtual Reality*. Moscow, Russia. September 14-16, 1994. pp 69-74.

Hand, C., Sexton, I. and Mullen, M. "A Linguistic Approach to the Recognition of Hand Gestures". *Designing Future Interaction conference* (Ergonomics Society/IEE), University of Warwick, 18th April 1994.

Hand, C. "From Dreams to Reality". in *Proceedings of the 1st UK VR-SIG Conference*, Nottingham University, March 1994.

## Personal Interests

Music is a very important part of my life. I'm a keen percussionist and have played with several groups over the last seven years, from samba schools to drum and bass collectives. In 2006 I spent the summer touring the UK, Austria and Spain with Orkestra del Sol, a 12-piece Balkan/carnival brass band.

I have also been producing and recording my own electronic music compositions for some time, as well as remixing other bands and DJing occasionally in clubs.

I also enjoy travel, cycling, cooking and learning languages.

## Referees

References available on request.

