DR TONY (ANTHONY) STOCKMAN

Date of Birth: 16 February 1960

Work Address: School of Electronic Engineering and Computer Science

Queen Mary College, University of London,

Mile End Road, London E1 4NS

Email: tonys@EECS.qmul.ac.uk

EDUCATION AND QUALIFICATIONS

1982-1985 University of Bradford

Doctor of Philosophy Degree in the Analysis of Physiological Control

1978-1982 University of Bradford

First Class Honours of Technology Degree in Computing and Data Processing

EMPLOYMENT HISTORY

September 2002 – present:

Senior Lecturer, Queen Mary College, University of London, UK

February 1999 – September 2002:

Academic Group Chair and Principal Lecturer, Middlesex University, UK

June 1995 – February 1999:

Principal Lecturer, Staffordshire University, UK

April 1989 – June 1995:

Senior Lecturer, Staffordshire University, UK

October 1985 - April 1989:

Business Systems Analyst, Imperial Chemical Industries (ICI) PLC, Manchester, UK

RESEARCH

My research is in Human-Computer Interaction (HCI), often with a focus on the use of audio in the interface. This includes examining at a fundamental level how to exploit the strengths and overcome the weaknesses of sound as a communication medium in HCI, and improving our understanding of auditory perception. I am also interested in cognition in relation to our use of the internet, and the ways this can be influenced by the technology used for web access.

Current projects include sonification of maps and diagrams, audio supported extreme navigation, sonification for sports training, accessible audio editing, Collaborative, cross-Modal Interfaces and the influence of screen readers on web cognition.

- I have been the president of the International Community for Auditory Display (ICAD) since 2011 and an ICAD Board member since 2003. I have worked on the organising committee for five ICAD conferences, Chairing the 2006 conference which was hosted at Queen Mary.
- I co-chaired the British HCI 2006 conference and have been on the organising committee for three other conferences.
- I am a member of the UK Engineering and Physical Sciences Research Council's (EPSRC) Peer Review College
- I am an Associate Editor for the Journal of the Audio Engineering Society (JAES).

GRANT FUNDING

Co-investigator on the EPSRC funded (£1.1M): "Platform Grant: Digital Music." 2013

(PI Prof Mark Plumbley) Grant reference EP/K009559/1

Co-investigator on the EPSRC funded (£1.1M): "Design Patterns for Inclusive Collaboration (DePIC)" 2012

(PI Dr Nick Bryan-Kinns) Grant reference EP/J017205/1. Project home page: depic.eecs.gmul.ac.uk

Co-investigator on the EPSRC funded (£228,000): "Collaborative Cross-modal Interfaces (CCMI), Research in the Wild (RITW)." 2010

(PI Dr. Nick Bryan-Kinns) Grant reference EP/H042865/1. Project home page: ccmi.eecs.qmul.ac.uk

Co-investigator on the UK Technology Strategy Board funded (£20,000): "AMUST: Accessible Music Studio." 2009
Grant reference AK720C/File Ref: 120112

Principle Investigator on the Staffordshire University funded (£22,000 internal grant): "Feasibility of a palm-top system for paramedics to collect patient data at accident sites."

Co-investigator on the Esmee Fairbairn Trust funded (£53,000): "The development of Access Technology support for visually impaired social work students."

TEACHING

I have 25 years experience, including PhD supervision and examining, Masters by Research, Conversion Masters, and undergraduate teaching, in Database systems, Human-Computer Interaction, Systems Analysis and Design and Computer Supported Cooperative Work.

SELECTED PUBLICATIONS SINCE 2008

Csapo A., Wersenyi G., Nagy H., Stockman T. (2015), A survey of assistive technologies

and applications for blind users on mobile platforms - a review and foundation for research, Journal of Multimodal User Interfaces, 9(3), 11 pages.

Metatla O., Bryan-Kinns N., Stockman T., Martin F., Sonifications for Digital Audio Workstations: Reflections on a Participatory Design Approach, Proceedings of https://doi.org/10.1007/jnternational-conference-on-Auditory Displays, Graz, Austria.

Metatla O., Martin F., Stockman T., Bryan-Kinns N., Designing with and for people living with visual impairments: Audio-tactile mockups, audio diaries and participatory prototyping. <u>CoDesign: International Journal of CoCreation in Design and the Arts</u>.

Gooda Sahib, N., Tombros, A. and **Stockman, T.** (2014), Investigating the behavior of visually impaired users for multi-session search tasks. *Journal of the Association for Information Science and Technology, issue 65*, pages 69–83. January 2014, doi: 10.1002/asi.22955

Durrant,A; Hook, J; D; McNaney, R; Williams, K; Smith, T; Stockman, T; and Olivier, P: Interpersonal expression in the special educational needs classroom: An experience-centred design case study International Journal of Child-Computer Interaction 06/2014; DOI: 10.1016/j.ijcci.2014.06.002

Loeliger E. and Stockman T: Wayfinding without Visual Cues: Evaluation of an Interactive Audio Map System, Interact. Comput. 2014 26: 403-416 Vol. 26, No. 5, September 2014

doi: 10.1093/iwc/iwt042

Stockman T. and Nickerson L., TOWARDS AN AGENDA FOR AUDITORY OVERVIEWS, Proceedings of ISon 2013, 4th Interactive Sonification Workshop, Fraunhofer IIS, Erlangen, Germany, December 10, 2013

Al-Thani D. Stockman T and Tombros A: Cross-Modal Collaborative Information Seeking (CCIS): An Exploratory Study, Proceedings of BCS-HCI 2013, London, September 2013.

Gooda Sahib, N., Tombros, A. **and Stockman, T.** (2013), Evaluating a search interface for visually impaired users. *Journal of the American Society for Information Science and Technology*. 04/2015; DOI:10.1002/asi.23325 ·

Gooda Sahib N. Stockman T. Tombros A and Metatla, O: Participatory

Design with Blind Users: A Scenario-based Approach, Proceedings of Interact 2013, Capetown.

Metatla O., Bryan-Kinns N., Stockman T., Martin F., Activity Theory as a Tool for Identifying Design Patterns in Cross-modal Collaborative Interaction.

Proceedings of Interact 2013, Capetown.

Mycroft, J., Reiss, J.D., Stockman, T. (2013). "The Influence of Graphical User Interface Design on Critical Listening Skills," Sound and Music Computing (SMC), Stockholm, July/Aug., 2013.

Stockman, T., The Development of Auditory and Cross-modal Displays for Assistive Technology, invited lecture at the Annual Symposium of the Society for Information Display (SID), Vancouver, May 19-24th, 2013.

Gooda Sahib, N. G., Tombros, A. and **Stockman, T.** (2012), A comparative analysis of the information-seeking behavior of visually impaired and sighted searchers. *Journal of the American Society for Information Science and Technology*, 63(2): 377–391. doi: 10.1002/asi.21696

Metatla O., Bryan-Kinns N., Stockman T., Martin F., Supporting Cross-modal Collaboration in the Workplace, proceedings of HCl'2012, the 26th annual conference on Human-Computer Interaction, Birmingham, UK.

Metatla O., Bryan-Kinns N., Stockman T., Martin F., Cross-modal Collaborative Interaction Between Visually-impaired and Sighted Users in the Workplace, Proceedings of the 22nd International Conference on Auditory Display, ICAD'2012, Georgia Institute of Technology, Atlanta, GA, USA. Metatla O., Bryan-Kinns N., **Stockman T.** (2012), The Effects of Using Headphones and Speakers on Collaboration in an Audio-only Workspace. *Journal of the Audio Engineering Society - special issue on Auditory Display,* 60(7/8): 540-550.

Metatla O., Bryan-Kinns N., **Stockman T.** (2012), Interactive hierarchy-based auditory displays for accessing and manipulating relational diagrams. *Journal on Multimodal User Interfaces*, *5*(3): 111-122.

doi: 10.1007/s12193-011-0067-3

Molster A. and Stockman T: On the Road to Design: Developing a sonified route navigator for cyclists, Proceedings of ICAD2011: the 21st International Conference on Auditory Display, Budapest, June 2011

Morrell, M. J. Reiss J. D. and Stockman T: Auditory cues for gestural control of Multi-track audio, Proceedings of ICAD2011: the 21st International Conference on Auditory Display, Budapest, June 2011

Stockman, T. (2010), Listening to People, Objects, and Interactions. *Keynote presentation of the 3rd Workshop on Interactive Sonification (ISon2010),* Stockholm, Sweden.

Frauenberger, C., **Stockman, T.** (2009), Auditory Display Design, An Investigation of a Design Pattern Approach, *International Journal of Human-Computer Studies, special issue on Sonic Interaction Design, 67(11):* 907-922.

Metatla, O., Bryan-Kinns, N., **Stockman, T.** (2008), Constructing Relational Diagrams in Audio: The Multiple Perspective Hierarchical Approach. *Proceedings of the 10th International ACM SIGACCESS Conference on Computers and Accessibility*, Halifax, Nova Scotia, Canada. doi: 10.1145/1414471.1414491

Signed: Dr. Tony Stockman Date: 27th of July, 2015.