Stephen Brewster

Professor of Human-Computer Interaction School of Computing Science, University of Glasgow, UK http://mig.dcs.gla.ac.uk stephen.brewster@glasgow.ac.uk

I lead the Multimodal Interaction Group, which currently consists of five post-doctoral researchers and eight PhD students. My group is very active and with a very strong international reputation. I have over 400 publications in top international journals and conferences (my full publication list can be found at mig.dcs.gla.ac.uk/publications). My papers have over 23,000 citations and I have an H-index of 78 (Google Scholar, Oct, 2023). I hold a prestigious ERC Advanced Grant investigating the use of VR and AR in vehicles. I am a Fellow of the Royal Society of Edinburgh, a member of the ACM SIGCHI Academy and an ACM Distinguished Speaker.

My research centres on multimodal HCI, using multiple sensory modalities and control mechanisms to enable a rich, natural interaction between human and technology. My work has a strong experimental focus, applying perceptual research to practical situations. The modalities I have studied most are audio, haptics and gesture, and I have applied these in many different application areas, including new interactions for mobile phones and tablets, interaction design in AR/VR, access to information for blind people to improve inclusion in society and in-car user interfaces to enhance driving safety.

Products and services are becoming ever more complex and this can result in systems that are difficult to use and user groups that are excluded. My vision for solving these problems is to investigate fundamental new methods for interacting with technology using new sensing and control modalities that enable interfaces more suitable for the user and the context. Of particular interest are understanding and developing new forms of haptic, touch-based, interaction for VR applications.

ORCID: <u>orcid.org/0000-0001-9720-3899</u>

Google Scholar: scholar.google.co.uk/citations?hl=en&user=uu7LudIAAAAJ

Education

1990 – 1994 University of York, Department of Computer Science, DPhil, Human-Computer Interaction, "Providing a structured method for integrating non-speech sounds in human-computer interfaces". During my PhD, I won the 1992 Gibbs-Plessey award.

Employment

- 2021 2022 Research Excellence Framework 2021 Subpanel 11 committee member
- 2019 2025 ERC Advanced Grant
- 2003 2008 EPSRC Advanced Research Fellow
- 1995 Present Appointed as Lecturer, University of Glasgow, Reader in 2000 and Professor in 2001

Awards

2017 Elected as a Fellow of the Royal Society of Edinburgh2014 Elected to the ACM SIGCHI Academy

I have over 25 Best Paper Awards and Nominations in top international conferences including: ACM CHI, ACM ICMI, ACM MobileHCI, ACM AutoUI and ACM TVx (see mig.dcs.gla.ac.uk/publications).

Research Supervision

I have supervised over 25 PhD students to completion.

Research Funding and Collaboration

I have had over 10 EPSRC research grants, 8 EU grants, 4 SFC grants, along with funding from charities (e.g. ONCE, BUPA, CHSS) and industry, bringing in over £12M to Glasgow. I was the Coordinator of the €3m FETOpen LEVITATE project and hold the ViAjeRo ERC Advanced Grant fellowship.

I work closely with many international Universities, including Lund, IIT Genoa, Tampere, Aalto and Lille, and companies, including Bang & Olufsen, Jaguar Landrover, Nokia, Freescale/NXP and MobileVCE.

Recent Invited Conference Keynotes

2023	MobiUK
2022	Mensch und Computer (Germany), ACM EICS (France), AVI (Italy)
2020	IEEE ICHMS, QoMEX
2019	Irish HCI conference
2018	ACII Asia, Beijing, and International Workshop on Human Behaviour Understanding

I am an ACM Distinguished Speaker and have given over 150 invited talks to universities and companies around the world, including Nokia, Nuance, HP Labs, Telefonica, Deutsche Telekom, ABB and Samsung and at Universities including Aalto, McGill, Auckland, Magdeburg, Ohio State and Sapporo.

Conferences Organised and Journal Editorships

2019	Conference General Co-Chair for ACM CHI 2019, Glasgow. This was the first time the
	conference had been held in the UK
2017	Papers Chair for ACM ICMI (Glasgow, UK)
2013 and 2014	Papers Chair for ACM CHI

In 1998 we started the MobileHCI conference series in Glasgow. I chaired it in 1999, 2001 and 2004. The MobileHCI conference series is now internationally recognised as one of the most influential in the area. I am Associate Editor for Personal and Ubiquitous Computing, on the Management Board for the International Journal of MobileHCI. Previously an editor for Springer JAIS.

Public Engagement

My work has featured on Spanish TV, BBC Radio 4 and BBC TV, in UK national newspapers, New Scientist and three times at the Science Museum in London. My work also represented the School at the Royal Society's Summer Science exhibition. My group's research on the EPSRC MultiVis project on access to graphics for blind people featured in the Canadian Broadcasting Corporation's series "When the machine awakes". My work on the EPSRC MultiMemoHome project featured on STV News and Radio Scotland. My work on tactile displays was exhibited at the Victoria and Albert Museum for their 'Touch Me' exhibition. My EPSRC-funded AudioClouds project was the lead article on the BBC technology website. In the UK, it featured in the Economist, the Independent, the Scotsman, and in the USA it featured in Newsweek and Wireless News. Articles appeared in, amongst others, Holland, Austria and Poland. My work with Glasgow Vet School on haptic veterinary training simulators was filmed for the Australian science show "Beyond Tomorrow". This work was commercialised and is now used as a training aid in many UK vet schools. I have given public lectures and demos of my work in many locations including Auckland, Christchurch, Glasgow and London. My work regularly features in our School open days and public events to show computing science research to the wider world.