



Qualifications

MEng in Electronic and Electrical Engineering (2:1)

1995-1999: Imperial College of Science, Technology and Medicine, London

A-Levels (Maths -A, Physics -A, Chemistry -A) , GCSEs (8*A, 2*B)

1988-1995: The Holy Trinity School, Crawley

Personal Statement:

I have made a significant impact on the electronic assistive technology field, having been intensively involved in this community since the beginning of my career. I have skills and experience combining the technical skills of electronic assistive technology, electronic engineering and computing with the person centred skills required to involve users in the assessment, trial, specification and design of technologies. I often see my role as managing the often contrasting needs of people and the potential of technology.

My current role is leading the Barnsley Assistive Technology team and have developed the team to become a recognised leader in the field with an international reputation for quality. In addition I am an honorary researcher with Sheffield University and collaborate on a number of research projects.

Employment:

Barnsley Assistive Technology Team (2007 – Present)

www.barnsleyhospital.nhs.uk/at

The Barnsley AT team offers a specialist service across three districts of Yorkshire – working with local professionals to provide relevant electronic assistive technology. As the senior Clinical Scientist I run the team of Clinical Scientists and Clinical Technologists operating a unique and efficient delivery model. I have been responsible for developing the team through specialisation, streamlining policies and procedures and improving care pathways. I have a clinical role within the team and in addition carry out research in conjunction with the rehabilitation and assistive technology group of Sheffield University.

ACT (2004 – 2007)

www.wmrc.nhs.uk/act

ACT is a regional specialist electronic assistive technology service, the department consists of Speech and Language Therapists, Occupational Therapists and Clinical Scientists supported by Medical Technical Officers and Administrators. As a state registered Clinical Scientist within this team my role included a clinical role carrying out assessments across a diverse and complex case load and leading in the development of technology within the service.

MERU (1999-2004)

www.meru.org.uk

MERU is a not-for-profit organisation making custom made equipment for individual children with disabilities. I jointly setup and ran a unique specialised service creating bespoke electronic assistive technology controls.

As the only Clinical Scientist within this team my roles were diverse and included: production of bespoke computer interface equipment; assessment of children with disabilities for custom-made equipment; service management & administration and management of external collaboration and care pathways.



Significant Recent Projects:

Communication Matters, research matters: evidence of need project

I am the joint principle investigator on this project which aims to provide data to evidence the level of need for aided communication in the UK. This bid (of ~£0.5m) was developed in collaboration with Communication Matters and is a significant milestone for the organisation. It will provide a synthesis of qualitative and quantitative data which will provide a rich picture around the need for aided communication that can be used to support funding and service provision.

Development of speech recognition systems (SPECS & Vivoca2 projects): user involvement

I lead the user involvement and user interface design aspects of these significant projects (approx. £1.5m in total) which are aiming to develop speech recognition systems for people with disordered speech. This suite of projects represents a significant technical challenge and requires a significant level of user involvement in order to understand the user requirements and manage the complexities of the technology. [www.shef.ac.uk/cast/projects/vivoca]

Communication aid design (Devices for Dignity AAC project): user requirements

This project investigated the design requirements of users of communication aids, people who use communication aids (and have difficulties with speech) are a notoriously hard to reach group and their needs are poorly understood. This scoping project investigated the needs of users through a mixture of research methods. [www.devicesfordignity.org.uk/aac]

Development of simplified computer interfaces (Maavis project): usability

I jointly conceived this open source software project - Maavis is designed to include people otherwise excluded from the possible benefits of technology because of its complex interface. Maavis has been successfully trialled with people with dementia and children with special educational needs and uses a flexible, open development platform. [<http://maavis.fullmeasure.co.uk/>]

Open source assistive technology software: creating an open community

I jointly conceived and developed the OATS website – a website and community promoting and listing open source assistive technology software. This site is well recognised and has been running for over 6 years as the most authoritative source of this information. [www.oatsoft.org]

RAATE, CM and JAT: developing the assistive technology field

I am actively involved in developing and promoting electronic assistive technology in the UK: I am on the scientific committee of RAATE - the UK's main assistive technology conference; I am a trustee of Communication Matters - representing the needs of AAC users and organising the UK's main AAC conference; and I am on the editorial board of the UK based Journal of Assistive Technology. [www.raate.org.uk; www.communicationmatters.org.uk; www.emeraldinsight.com/products/journals/journals.htm?id=jat]



Recent Publications:

S. Baxter, P. Enderby, P. Evans, and **S. Judge**, "Systematic review of the literature on barriers and facilitators to use of high technology augmentative and alternative communication devices," *International Journal of Language & Communication Disorders*. In press, 2011.

S. Judge, Z. Robertson, and M. Hawley, "The limitations of speech control: perceptions of provision of speech-driven environmental controls," *Journal of Assistive Technologies*, vol. 5, no. 1, pp. 4-11, Mar. 2011.

S. Judge and M. Friday, "Ambiguous Keyboards for AAC," *Journal of Assistive Technology*. In Press, 2011.

S. Judge and T. Griffiths, "Looking to the future," *Ability*, vol. 74, pp. 23-24, Aug. 2009.

S. Judge, Z. Robertson, and M. S. Hawley, "Users' Perceptions of Environmental Control Systems," in *Assistive Technology from Adapted Equipment to Inclusive Environments - AAATE 2009*, 2009, vol. 25, pp. 426-431.

S. Judge, Z. Robertson, M. Hawley, and P. Enderby, "Speech-driven environmental control systems - a qualitative analysis of users' perceptions," *Disability and Rehabilitation: Assistive Technology*, vol. 4, no. 3, pp. 151-157, May. 2009.

S. Judge, "Recent Advances in Assistive Technology and Engineering (RAatE)," *Advances in Clinical Neuroscience and Rehabilitation*, vol. 8, no. 1, pp. 39-40, Mar. 2008.

S. Judge and S. Blackburn, "The use of eye-gaze data in the evaluation of assistive technology software for older people.," in *Proceedings of COGAIN 2008, "Communication, Environment and Mobility Control by Gaze,"* 2008, pp. 67-72.

S. Judge, "Information-sharing and evidence base within assistive technology: some current tools," *Journal of Assistive Technologies*, vol. 1, no. 2, pp. 52-53, Dec. 2007.