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THE LANGUAGE AND MEANING OF IMPLANTABLES FOR HUMANS

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Thursday 30 July 2009 at 6:00pm
ICT Theatre 2, The University of Melbourne
(Ground Floor, 111 Barry Street, Carlton South)

Public welcome — no entry charge

Abstract

The practice of adopting artificial limbs for prosthesis can be traced back to 1000 BC to the ancient Egyptians of the Third Intermediate Period. Beyond the replacement of missing teeth, wholly functional implantable technologies embedded within a human being are a recent phenomenon. The introduction of pacemakers in the late 1950s began the humancentric implantable revolution. Today, there is an array of implantable technologies dedicated to medical applications on the market, from the cochlear implant to aid the hearing impaired to the injected health chip used to automatically access personal electronic health records (EHR) in the event that an implantee is incapacitated. Modern adaptations of implantable devices have meant that microchip implants in the form of radio-frequency identification devices (RFID) have also been widely trialed for other applications such as access control, automatic payments, computer-mediated living, and location based services. While no one could ever envisage the ability to 'inject' a computer the size of the ENIAC into the human body, meso, micro, and nano-devices have meant that we can realistically predict a time when people will be bearing numerous implants for a variety of applications. While the industry around implantable technologies is burgeoning given the promise of nanotechnology, the social implications of the technology are not well understood. This presentation will propose an ontology for humancentric implantable technologies including a number of standard definitions and a specialist taxonomy which is absent from the field. There is a pressing need for a common language to be set around implantable technologies for humans with a view to interdisciplinary exchanges by diverse stakeholders, including members of the public, researchers, industry representatives and government law and policy makers.

About the speaker

PhD (UOW), BIT (UTS). Katina Michael is a senior lecturer in the School of Information Systems and Technology, University of Wollongong, where she specializes in the social impact of emerging technologies. Her latest book is titled Innovative Automatic Identification and Location-Based Services: from Bar Codes to Chip Implants, published by IGI. She is currently doing a Masters of Transnational Crime Prevention in the Faculty of Law at the University of Wollongong. She is a senior member of the Institute of Electrical and Electronics Engineers and a board member of the Australian Privacy Foundation. Katina has held previous employment as a senior network and business planner for Nortel Networks and systems analyst roles at United Technologies and Andersen Consulting.

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