Call for Papers

Special issue of DISPLAYS: Displays for Medical Devices

Special issue editors:

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Most novel medical instruments and instrumentation, whether used for surgery, treatment or diagnosis, will incorporate a range of interaction mechanisms and interface designs, for both clinicians and patients. This will often require the application of advanced communication and display technologies, and involve the integration of numerous varied feedback mechanisms to indicate, for example, correct usage or the results of a measurement of physiological function; often in an environment that will be stressful for all parties concerned. For a device to be successfully adopted its design can prove crucial, with respect to meeting the user requirement’s specification, the impact of the device design on the patient’s health and of course the displays that enable the user to interact with the device.

This special issue invites papers that address the problem of producing appropriate designs of devices for use within a medical context. This could include papers that present novel means of providing feedback from, or means of interaction with, the device by clinicians and patients; methods for eliciting or evaluating user needs to inform the design of such devices; and critical analysis of existing technologies used within a medical context. It is hoped that the special issue will cover discussion of devices that provide interaction and display opportunities of all types – including visual, auditory and haptic displays.

Displays is the international journal covering the research, development and application of displays technology and its effective presentation of visual information.

Coverage includes:
Technology: display devices, display materials, display electronics, image characteristics, technical aspects of multimedia, 3-D displays and virtual environments, auditory and tactile displays, colour, filters, printers.

Human Factors: user psychology and human-computer interaction, measures of visual performance, decision making from displays, colour appearance, reproduction and coding, graphical and multi dimensional user-interface design, information presentation, user-centred evaluation of display design and use, image quality, image processing, input, output and interactive devices, small screen, pervasive and ubiquitous computing displays, wearable computing, multimedia systems, virtual environments, augmented reality, 3D computer graphic design and animation, displays in transport, healthcare, engineering, creative industries and education, accessible and inclusive design, design standards and guidelines, auditory, tactile and multimodal displays.

If you are interested in submitting to this special issue, please contact either sarah.sharples@nottingham.ac.uk or john.crowe@nottingham.ac.uk
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One page paper summaries can be submitted for initial comment by the special issue editors by 30th June 2010 – approval of a one page summary does not imply acceptance of a full paper.