

NUC case study

Consultancy with major car manufacturer – Dr Gary Burnett

Dr Gary Burnett, from the Faculty of Engineering at the University of Nottingham, is working closely with a prestigious car manufacturer to develop and improve the interactive computing technology that they install in their vehicles.

In-car computing devices, often used in vehicles to control features such as satellite navigation and, increasingly, to allow users to access music and apps on their smartphones, are now a major part of the driving experience.

However, in order to develop engaging and user-friendly interfaces which do not distract the driver from the road, vehicle manufacturers need to understand how users interact with them.

Dr Gary Burnett was approached by the company thanks to his expertise in driver interface research. Through a consultancy agreement, administered by Nottingham University Consultants, Dr Burnett was asked to investigate the ways in which people interact with in-car computing devices across both the UK and China.



The University of Nottingham, with its state-of-the-art driving simulator facilities and overseas campus in Ningbo, was excellently placed to conduct the research. Two studies were undertaken – one in China and one in the UK, and results were compared to identify any differences between the two countries.

Participants were asked to use a driving simulator, which mimicked real-life road conditions. Dr Burnett used eye-tracking technology to monitor how they interacted with various types of user interface, and how this affected the way that they drove.

Results from the study demonstrated interesting differences between the way that drivers from the UK and those from China use different types of interface. These results are feeding into the design process of the company's newest in-car computing devices - helping them to devise technology that is intuitive, useful and exciting to use.

Dr Burnett said: “This project enabled us to understand how drivers from different cultural backgrounds will interact with future technology in cars.



“As an initial consultancy arrangement, it has served as an excellent platform to develop a larger long-term research project on this topic.”

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