

Digital Media Processing attracts over 1.1 million euro funding in past year.

Digital Media Processing research in the School of Engineering has attracted over 1.1 Million Euros in research funding in the past year. The work is being conducted jointly by Prof. Anil Kokaram and Dr. Naomi Harte of the Sigmedia Group, and Prof. Frank Boland of the Audio, Acoustics and Music Research Group in the School. This funding is testimony to the strategic importance of this area nationally and internationally, and the recognised expertise in the group. Prof. Kokaram has recently been awarded a Science Foundation Ireland (SFI) PI Award in Content Aware Media Processing. The central theme of the work is that content analysis engines can be exploited to manipulate and alter visual media. This multidisciplinary project involves interaction with medical practitioners, microbiologists, marine biologists, and digital cinema experts. Partners include RCSI, TCIN, the Department of Zoology in TCD and The Foundry, UK. Dr. Harte has recently commenced work on an SFI sponsored Research Frontiers Programme in Dynamic Features for Audio-Visual Speech Recognition. This work is exploiting important visual cues humans use in lip-reading to improve speech recognition by computers. Research has also begun on a new SFI TIDA project entitled "Content Based Multiview Media Editing for eLearning Environments" (CBM²E³). This work follows on from an SFI sponsored project in smart lecture summarisation for E-Learning involving Prof. Kokaram and Prof. Boland.

These latest awards follow on from other recent successes including Prof. Kokaram's Technical Oscar in 2007, an endowment from Adobe Research Inc., involvement in the EU FP7 Project i3dPost and securing of an SFI Engineering Initiative post in Digital Media Processing, co-sponsored by Digital Theatre Systems (DTS). The group brings extensive expertise in Digital Signal Processing to applications in image, video, speech and audio processing. At present, the complete research team comprises the three faculty, four post-doctoral research fellows and fifteen Ph.D. students. Additional projects in Digital Media Processing focus on 3D Cinema post-production, ancient manuscript restoration, biometrics, digital hearing aids, and the creation of virtual audio environments. The group output includes over 90 refereed publications in the last 5 years, 13 Ph.D. graduates, co-organisation of the highly regarded Industry/Academic conference CVMP.org this year, a special session at Siggraph 2009 and another at the next IEEE International Conference on Image Processing (ICIP) dealing with Stereo-3D Cinema Technology.

