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Keynote

Star Wars The Force Awakens: Character Performance, Capture and Development for the New Stars in the Galaxy

Ian Comley, CG Supervisor, Industrial Light & Magic, London

Biographical Note

Ian Comley is a Computer Graphics Supervisor at Industrial Light & Magic (ILM), London. His most recent film work is on the visual effects for 'Star Wars: The Force Awakens', and previous projects includes 'Paddington', 'Guardians of the Galaxy', the multi-award winning 'Gravity' and 'Harry Potter'. He is also actively involved in next-generation technology development at ILM.

His CG supervision and a previous focus on character 'look development' and CG technology stem from a mixed art / science background, including BEng Computer Engineering from Southampton University and MSc Computer Animation at the National Centre for Computer Animation.

Ian has contributed to the UK Science, Technology Engineering and Maths programme encouraging students to pursue careers involving these disciplines, has been speaker at SIGGRAPH, run a Master Class at the National Centre for Computer Animation and been a Juror for the CG Student Awards.

Keynote

Capturing, Perturbing and Assisting Movement in Neurorehabilitation using Wearable Sensors and Robotics

Roger Gassert, Rehabilitation Engineering Lab, ETH Zurich

Biographical Note

Roger Gassert is Associate Professor of Rehabilitation Engineering at ETH Zurich. He received an M.Sc. degree in microengineering and a PhD degree in neuroscience robotics from the Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland, in 2002 and 2006, respectively. During his PhD, partially carried out at the ATR Computational Neuroscience Labs in Kyoto, Japan, he developed an MRI-compatible robot technology that led to the first haptic interfaces allowing well-controlled and reproducible interaction with human motion during functional whole-brain neuroimaging. These systems are being used to investigate the neural mechanisms of sensorimotor control and recovery following neurological injury. He subsequently participated in the development and evaluation of pioneering robotic rehabilitation systems to train hand function after stroke as a postdoctoral fellow at Imperial College London and Simon Fraser University in Vancouver, Canada, supported by the Swiss National Science Foundation. From December 2007 to November 2008, at the Robotic Systems Lab at EPFL, he directed the joint robotics lab between EPFL and the University of Tokyo, Japan. He joined ETH Zurich in 2008, where he was an Assistant Professor of Rehabilitation Engineering until 2014. He is member of the foundation board of the Swiss Foundation for Rehabilitation Technology and the Swiss foundation Access for all. His research is concerned with the development and application robotics/haptics, wearable sensor technologies and non-invasive neuroimaging to the exploration, assessment and restoration of human sensorimotor function.