


Research Assistant - School of Computing	
Role Description	

Grade & Salary:	Grade 4: £25,728 - £30,688 per annum
Campus Location:	Disney Research Edinburgh (15 South College Street) with secondments to ETH Zurich
Line Manager:	Professor Kenny Mitchell
Role Summary:	<p><u>Research Assistant (salaried PhD student) on the DISTRO project</u></p> <p>The role is to contribute to ground breaking computer vision, graphics and fabrication works including real-time integration of fabricated toy registration, tracking, and actuation with video game simulation and gameplay components. Analytic transfer functions for low-latency tracked real physical impulses to virtual simulation and, conversely, game physics simulation to real world actuation aims to enhance interactivity between real and virtual world. Structure and balance analysis and quality measures for fabricated physical augmentations and modular interconnection design assemblies for toys, further form key aspects of the plan of research.</p>

Main Duties and Responsibilities	
➤	Delivery against project work plan objectives and specified outcomes
➤	Collaborative project planning including training in complementary skills such as research management.
➤	Contribute world-class competence in augmented reality tracking and rendering in the context of physical toys for interactive entertainment.
➤	Tight collaboration with project partners and frequent visits to the involved labs, active participation at the annual network events.
➤	Support the design, development, installation and integration of modular component framework for digital interactive 3d printed devices.
➤	Assist in preparation of articles for technical journals
➤	Reports and presentations as required to supervisor, host organisations, funding organisation and as required to advisory groups.
➤	Liaison and coordination of activities with other DISTRO partners including: ETH Zurich (CH), DFKI (DE), MPI Informatik (DE), Saarland University (DE), IST Austria (AT), Napier University (UK) and Charles University in Prague. There are also numerous industry partners involved in the project: NVIDIA Research (US/FI), Gbanga (CH), Allegorithmic (FR) and Evolute (AT).

➤	Be responsible for ensuring that the information and records processed (received, created, used, stored, destroyed) on behalf of the University are managed in compliance with ALL applicable legislation, codes and policies e.g. Data Protection , Information Security and Records Management .



Person Specification

Attributes	Essential Requirements	Desirable Requirements
Education/Qualification	Undergraduate Honours degree in relevant subject area of Mechanical Engineering, Mechatronics, Electronics & Electrical Engineering or Manufacturing Engineering.	Post Graduate Degree in relevant Engineering discipline.
Experience (Type/Duration)	<p>Experience of working on graphics and/or vision projects.</p> <p>Experience of working on collaborative projects</p>	<p>Experience of working in a research environment.</p> <p>Experience of multi-disciplinary working.</p> <p>Experience in real-time optimization techniques</p> <p>Experience of successful project completion</p>
Skills/Personal Requirements	<p>Ability to work in partnership with others to achieve challenging commercial goals and react positively to change.</p> <p>Excellent organisation, prioritisation and time management skills.</p> <p>Excellent interpersonal skills, with ability to work in as an integral member of the project team and on own initiative.</p> <p>Excellent communication skills (written, verbal and presentation), with the ability to communicate research to</p>	<p>Ability to communicate research orally, to individuals and groups, with impact.</p> <p>UK/ EU Driving licence to carry out research visits.</p>

	<p>individuals and groups with impact.</p> <p>Basic research skills and ability to collect, analyse and write up data.</p> <p>Willing to work on a number of different projects at one time.</p> <p>Ability to maintain consistently high standard of research.</p> <p>Willingness to travel.</p> <p>Ability to provide guidance, as required, to support staff and any students who may be assisting with the research.</p> <p>Ability to contribute to the planning of research projects.</p> <p>Ability to continue to update knowledge and develop skills.</p>	
<p>Funding Body Eligibility Requirements</p>	<p>Candidates must fulfil the “mobility requirement” imposed by the EU for ITN networks which means that they must not have worked or resided in the UK for more than 12 months during the three years prior to joining the project.</p> <p>The candidate must match the profile of an early stage researcher (ESR) i.e. must not hold a PhD degree and must have less than 4 years research experience.</p>	