



LEEDS
BECKETT
UNIVERSITY

Citation:

Behringer, R (2008) Creative Technology - Research, Development, Practice. In: Marie Curie Conference, 17 Jul 2008 - 18 Jul 2008, Barcelona, Spain.

Link to Leeds Beckett Repository record:

<https://eprints.leedsbeckett.ac.uk/id/eprint/808/>

Document Version:

Conference or Workshop Item (Other)

The aim of the Leeds Beckett Repository is to provide open access to our research, as required by funder policies and permitted by publishers and copyright law.

The Leeds Beckett repository holds a wide range of publications, each of which has been checked for copyright and the relevant embargo period has been applied by the Research Services team.

We operate on a standard take-down policy. If you are the author or publisher of an output and you would like it removed from the repository, please [contact us](#) and we will investigate on a case-by-case basis.

Each thesis in the repository has been cleared where necessary by the author for third party copyright. If you would like a thesis to be removed from the repository or believe there is an issue with copyright, please contact us on openaccess@leedsbeckett.ac.uk and we will investigate on a case-by-case basis.

Creative Technology – Research, Development, Practice

Reinhold Behringer, Leeds Metropolitan University, Leeds, United Kingdom



Creative Technology

Technology which enables the human creativity by providing means for new types of creative products and output.

Covers Computer Music, Computer Graphics and Animation, Computer Games, Video and Audio Production.

Impact on Society

Linking Information Technology with Arts.

Novel way of engaging audiences.

Towards Artificial Creativity.

Specific Topics of the Leeds Met Centre for Creative Technology

	Research	Development	Practice
Computer Music	Aesthetics, sound creation, automatic composition	Interfaces to instruments	Compositions Performances
Computer Graphics	Mixed/augmented reality	Animation, simulation, computer games	Artistic graphics, interactive installations
Machine Intelligence	Language understanding, computer vision	Human-computer interface	Applications in learning and teaching

Collaborators

- [1] Bradshaw, Hazel
- [2] Elliott, John
- [3] Fabri, Marc
- [4] Folley, Duncan
- [5] Gangari, Rana
- [6] Guest, Elisabeth
- [7] Larkman, Brian
- [8] Ramachandran, Muthu
- [9] Renshaw, Tony
- [10] Singh, Bal
- [11] Stevens, Richard
- [12] Ward, Michael
- [13] Wilkinson, Steve

Research Focus:

Immediate interaction between human and machine.
Enabling human creativity.
Study human-computer interaction.

Principles of creativity.
Automatic extraction of creative elements in digital art and music.

“Artificial Creativity (AC)”.
Make machine a creative partner to humans.

Development:

Develop and implement novel ways of human-computer interaction (hardware and software/system).

Practice:

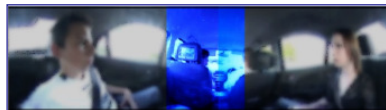
Creative practitioners: composers, performers, graphic designers, animators.

Using technological principles as an aid to creating novel art works.

“Creative Technology – An Oxymoron?”



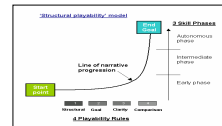
Medical Simulation [13]



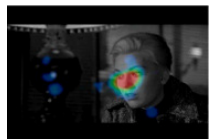
Interactive Video [5][7]



Motion Capture [4]



Structural Game Playability [1]



Eye Tracking [9][11]



Graphics and Video

Augmented Mixed Reality

Computer Games

Creative Technology

Music and Audio

Human-Computer Interaction Technology

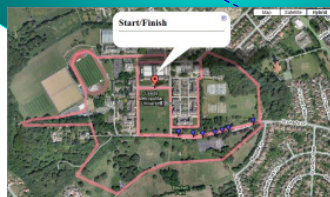
Artificial Intelligence



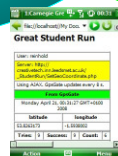
RePossessed



Tangible Interfaces [10]



Geo-centric interfaces



Software Development [8]



Emotional Avatars [3]



Computer as Musician [12]



Computer Vision [6]



Search for Extra-Terrestrial Intelligence [2]