concept

i3DPost will combine advances in 3D data capture, 3D motion estimation, post-production tools and media semantics. The result will be film quality 3D content in a structured form, with semantic tagging, which can be manipulated in a graphic production pipeline and reused across different media platformsincluding films (either 2D or 3D), computer games, music and promotional videos.

The data capture of actors is today performed in specialised studio set-ups. The integration of multiple view 3D video analysis with on-set production will allow the creation of video quality actor and set models.

Postproduction tools will be extended robustly to separate and manipulate scene elements. On-set capture of actor performance will be instrumented in a structured form for processing and rendering in a conventional graphics production pipeline whilst maintaining the visual quality of captured video for faces, body, and clothing movement. Structured representation of actor performance will enable flexible processing in post-production.

contact

THE FOUNDRY

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Project Website

www.i3dpost.eu

Partner websites

www.thefoundry.co.uk

www.buf.com

www.quanticdream.com

www.tcd.ie

www.iti.gr/db.php/en/pages/about.html

www.surrey.ac.uk

European Commission

www.cordis.europa.eu

i3DPost

Intelligent 3D content extraction and manipulation for film and games.

i3DPost is an EU Project under Framework 7 ICT Programme. This project is formed of six companies and educational institutions that are Europe's leading specialists in their fields. The project will run for three years.

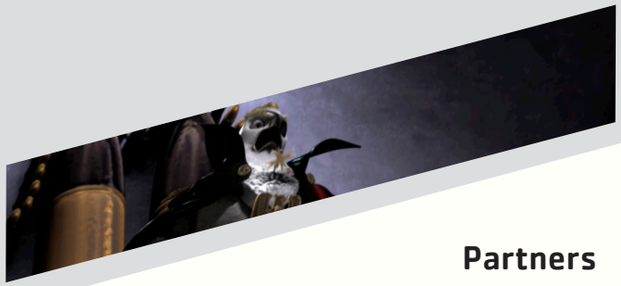
i3DPost will develop new methods and intelligent technologies for the extraction of structured 3D content models from video, at a level of quality suitable for use in digital cinema and interactive games.

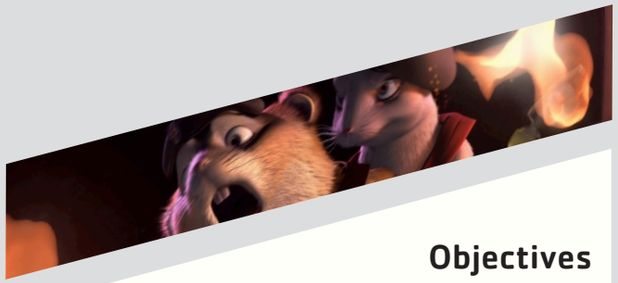
The research will enable the increasingly automatic manipulation and re-use of characters, with changes of viewpoint and lighting.

Co-funded by the European Union

SEVENTH FRAMEWORK PROGRAMME

THE FOUNDRY





Partners

THE FOUNDRY

Based in London, THE FOUNDRY Visionmongers Ltd is a leading developer of visual effects and image processing technologies that boost productivity and workflow in film and video postproduction. In i3DPost, The Foundry is the Project Co-ordinator & leads the work on software development.

BUF

BUF Compagnie is based in Paris, France. The company has been regarded as one of the most innovative visual effects companies in the world for feature films, commercials, music videos and special venue projects. In i3DPost, BUF will lead the user-related work in the postproduction area

The University of Dublin | Trinity College
Ollscoil Átha Cliath | Coláiste na Tríonóide

TRINITY COLLEGE, Dublin, is the leading research institute in Ireland in terms of income, output such as papers, patents, spin-off companies and company based projects. Three researchers from the Sigmedia tv group will be involved with i3DPost.

The AIIA Group at CERTH-ITI, Thessaloniki, Greece has been researching digital media for more than a decade. In i3DPost, CERTH-ITI conducts the semantic research into labelling point clouds and actor models.

quantic dream

QUANTIC DREAM, Paris, is one of France's largest independent video game studio and has gained an international recognition for its contribution to interactive narration and its fresh thinking on emotion in games. In i3DPost, Quantic Dream will lead the user-related work in the games production area

UNIVERSITY OF SURREY

UNIVERSITY OF SURREY Centre for Vision, Speech and Signal Processing, is one of the largest machine vision groups in the UK and has an established international reputation. In i3DPost, it leads the work on 3D data capture and content structuring.

Objectives

The overall objective is to integrate 3D information extracted from the visual scene into all stages of the postproduction pipeline, supported by semantic metadata, at a quality level that meets the requirements of the film, games and professional media industry.

It will be achieved and assessed via five Scientific and Technical Objectives:

O1 - To capture and represent 3D data from still and moving objects
O2 - To generate high-quality representations of sets and actors from the captured data, for use in different scenes or contexts, taking into account the dynamics of skin and clothing
O3 – To create software tools and plug-ins for the intelligent manipulation and repurposing of scenes, characters and faces
O4 - To show the usefulness of the technologies in experimental production across different media and platforms
O5 - To establish open standards for plug-ins for 3D content manipulation