



V4Design

Visual and textual content re-purposing FOR(4) architecture, Design and virtual reality games

In a world where visual and textual data are in abundance, V4Design is called to exploit all State-of-the-Art technological means so as to reuse and repurpose existing heterogeneous multimedia content so as to inspire and support the design, architecture, as well as 3D and VR game industries.

At A Glance: V4Design

Visual and textual content re-purposing FOR(4) architecture, Design and virtual reality games

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Type of Action: RIA

Total Cost: € 3,937,850.00

EC Contribution: € 3,937,850.00

Objectives

- Visual analysis and 3D reconstruction
- Content extraction from textual and visual data
- Semantic knowledge representation and reasoning
- Text generation from semantic representations
- Combining geometric, semantic and textual information in dynamic 3D objects

Use Cases

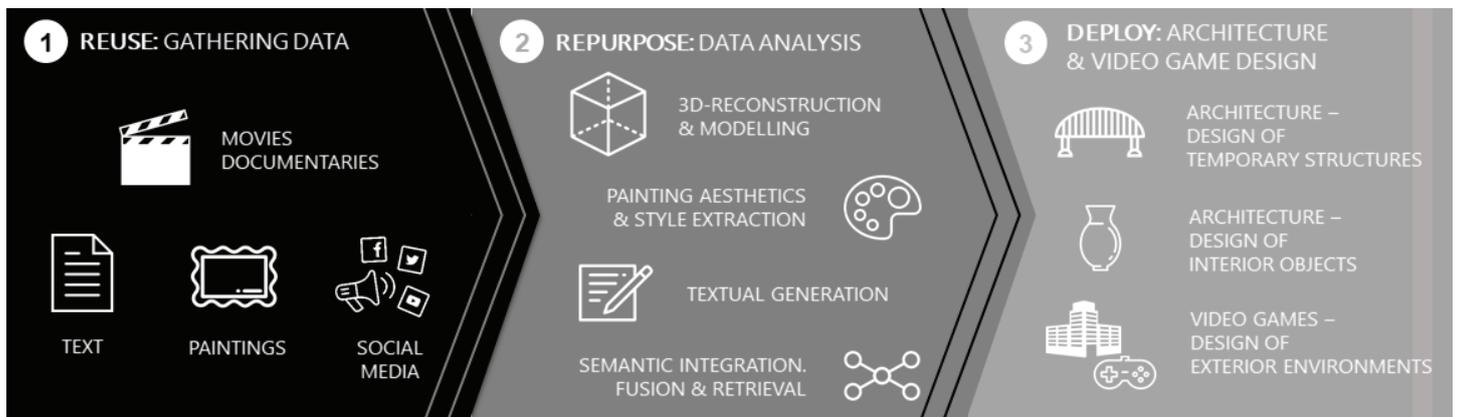
V4Design will validate the developed technologies through four use cases. The first two apply on architecture and design field, assisting architects, designers and artists to study various styles and support them to design and fabricate (a) large objects such as pavilions, land art, etc. and (b) novel collections of small scale industrial objects like furniture. The later two use cases focus on VR game design, supporting the reuse of existing video content to build (c) interactive media and VR games and (d) VR environments that will allow users to have a realistic and immersive experience.

Impact

- Reuse/repurpose the vast troves of existing content.
- Improve the inspiration and design process.
- Assist architects, designers and video game creators to have a greater impact with their work.

Outcome

- The final V4Design solution which will be offered as a plug-in for the Rhino platform and as back-end modular platform for video game design.
- Research modules and services (e.g. localization of objects and buildings, extraction of architectural 3D models, extraction of aesthetic concepts and emotional affect, embedding of semantic knowledge in dynamic 3D models, etc.), under commercial, open source or freeware licenses.



Partners



HERZOG & DE MEURON



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