

Aarhus Walks on Water

interactive event combining wearable technology and projection mapping in a public immersion context.

Interreg



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Principle Investigator
Research Fellow
Researcher

Professor Peter Richardson
David Tree
Dr. Doros Polydorou

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Aarhus Walks on Water forms part of The Big Picture 2017 a new transmedia festival for creative industries held on the Harbour Front Aarhus this and other events have been initiated in response to Aarhus being awarded European Capital of Culture 2017. This transnational collaboration invites digital content creators to work alongside some of the best young fashion designers under a banner of an international competition, the winners of which will see their

Project Partners:

Aarhus University
Via University College
Filmby Aarhus
Interactive Denmark
The Big Picture
Headstart Fashion



creations incorporated into a nouveau waterfront fashion show which will combine their designs with interactive realtime lightshow.

Internally the Games and Visual Effects Research Lab is collaborating with the Digital Hack Lab to develop a performance which will be integrated into the Aarhus Walks on Water event. The performance is a combination of filmed footage, Real time interaction, 3D

printed and wearable technology. Combining a 3D printable modular clothing system (ModeClix™) with wearable technology and a large-scale projection. The data collected from the wearable technology will drive an abstract procedurally generated visualization projected onto a large screen in addition to the side of a building.

The key outcome of this project is to further public engagement with wearable technology,





enabling the public to gain insight into how e-textiles will impact their lives. In addition to the show itself a series of workshops, talks and maker fairs running alongside the event to enable the public an opportunity to gain practical experience in utilising these technologies.

The areas of new knowledge addressed by this project is in the combining of wearable technology with large-scale crowd interaction.

Using the audience as a driving input for the visualization will offer them new levels of immersion and interactivity realized through a combination of mobile ready website as well as a passive system measuring real time audience metrics such as levels of clapping, the magnitude of crowd movement and dimensionality of the crowd itself. This data is then input into our interaction model which will drive output through wearable technology embedded within the

clothing on show. The output will be formed of varying arrays of Light Emitting Diodes as in addition to other outputs which could involve moving components subject to the designs. Alongside the interactive elements on the dresses themselves additional feedback will be provided through more traditional means such as lights, fog and the video wall.

The mission of Aarhus Walks on Water is to help forge and further cross-sectoral partnerships in a quadro-helix between creative industries, public innovation, the educational sector, and civic society. Realised through the merging of existing regional hubs for the creative industries, specifically the fashion hub, Headstart Fashion, Interactive Denmark and the hub for interactive visual media. Together with citizens and with international talents and partners and to help build and enhance local partnerships with education.



The audience for the event will be made up from a combination of invited creative practitioners as well as members of the general public. An expected audience of 5,000 to 10,000 will be extended through the use of a live 360 Video stream to enable a global audience to take part in proceedings. Using the mobile interaction page these global participants will also be able to take part in the interactive elements of the show.

In addition to the live event further citizen engagement will be made through collaboration between 2017Academy (strategic partnership between Aarhus2017, VIA UC and AU) and DOKK1 (Innovation, Technology, Creativity) in a number of workshops and talks, focusing on artistic intervention with wearables and the future city lab, on DIY wearables for interaction in city space, and on design of and prints of prosthesis. These engagements with citizens from Fall 2016 will also develop a local audience for the Aarhus Walks on Water Show.