# Multi-user Interaction in Digital Spaces for Art and Entertainment

## **Project Leader**

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## 1. Objective

The aim of the research project in this scholarship is to explore the creative application of digital technologies to performing arts - particularly dance, and interactive installations. The main research project focuses on sharing real-time data obtained from performers by motion capture devices and other kinds of sensor and then recreating the performance in local and/or remote locations in different ways. As well as working on the project team and taking a significant role in the design and development of such systems, the successful candidate is expected to produce good research output in related domains such as software systems, interaction design, and digital arts. It is also strongly expected that the successful candidate will initiate one or more research projects in the same research context (multi-user interaction in digital space for art and entertainment).

#### 2. Project Outline

### To that end, the project will consist of the following phases:

- (a) take part in an on-going EU-JP 'art+ technology' collaboration for dance performances and initiate an individual research project in a related domain.
- (b) organize a workshop as a member of the lecturer team, possibly as part of the user studies requirement for the Ph.D. thesis.
- (c) present the results of the artist-researcher collaboration at the Elevsis 2023 European Capital of Culture festival,
- (d) publish research papers in the fields of both computer science and digital arts.

#### 3. Expected Performance

### In this project, the successful candidate would be expected to:

- (a) participate in ongoing collaborative research for an EU-JP digital art project.
- (b) conduct an individual project in multi-user interaction for entertainment technology within the laboratory's research fields.
- (c) publish a minimum of two Q2 journal papers in related fields, as well as other publications for top conferences.

#### 4. Required Skills and Knowledge

### The successful candidate for this project will have the following knowledge and skills:

- (a) a strong interest in creative and cultural computing
- (b) a background in 'art and technology' and entertainment technology.
- (c) strong coding skills
- (d) experience participating in artistic practices in digital arts (strongly preferred).
- (e) near-native level fluency in English (MUST)
- (f) fluency in Greek (strongly preferred).
- (g) high motivation in learning Japanese and Japanese culture (preferred).
- (h) MAKE skills and experience in practical design project can be significant plus.

## References

The early EU project concept is described in this paper.

I. Zannos and M. Carle, "Metric interweaving in networked dance and music performance," in Proceedings of the 15th Sound and Music Computing Conference, pp. 524–529. 2018.

## See my webpage:

Supervisor's website https://www.hnishino.com Related website: The successful candidate will participate in The European Art - Science - Technology Network (EASTN) for Digital Creativity https://eastndc.eu/ mainly in the Izutsu-Daphnis-Echo project. https://ide-fantasy.tumblr.com/

# See our admission guidelines:

 $https://www.kochi-tech.ac.jp/english/admission/ssp\_aft19oct/ssp\_application\_guideline.html$ 

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