

# MEDIA INNOVATION & GAME RESEARCH (ME-GA)



## THE MEDIA INNOVATION & GAME RESEARCH (ME-GA) GROUP AT AALBORG UNIVERSITY DEPARTMENT OF ARCHITECTURE, DESIGN AND MEDIA TECHNOLOGY TECHNICAL FACULTY OF IT AND DESIGN

Innovative media experiences and serious games with the aim of supporting learning and communication. How to engage users, learners and players by designing, developing, and evaluating transformational and serious games, interactive adaptive narratives, story worlds and motivational learning environments. Virtual production and real-time tools for film and TV.

### RESEARCH

#### SPECIFIC RESEARCH

Our research combines evaluation methods with state of the art game- and media-technologies to address challenges, such as:

- › How is user-, player- and learner engagement evaluated?
- › How can the interest in designing and developing games be used to motivate learners to acquire technical skills such as programming?
- › How can interactive story worlds for learning become more engaging by adapting the narrative to the user in real-time?
- › How can real-time visual tools be used in industries such as movies, animations, television and games to make (virtual) productions more efficient and creative?

#### RESULTS

We use our knowledge to develop methods to create innovative learning environments with cutting-edge technologies. Our results can be used to design more engaging learning experiences.

Our research shows that digital game development acts as a valuable motivator for learning technical subjects, such as programming in public schools.

We also work on creating pipelines for more efficient media productions, e.g. animation for learning produced with real-time technologies. We also use AI as an enabling technology and create pipelines for more efficient VFX and media productions, e.g. animation for learning produced with real-time technologies.

### EDUCATION

#### STUDY RELATED ACTIVITIES

We teach programming, evaluation methods, AI, game theory, -design and -development, animation- and short film production.

We supervise various projects such as purposeful games, interactive story worlds, procedural content generation and real-time graphics. We also conduct PhD courses in advanced evaluation methods.

### COLLABORATION

#### WHO BENEFITS FROM OUR RESEARCH

Our research is particularly interesting for educators, learners, (serious) game researchers and -developers, as well as film-, TV- and animation directors and producers.

#### EXTERNAL PARTNERS

Our external partners are educational institutions and schools, game-, film-, TV- and animation companies, museums and learning organizations. Specifically, our partners include Samsung, Unity, Rokoko, Danish Broadcasting Corporation (DR), Tycho Brahe Planetarium, Region Zealand, Nordisk Film, Vision Denmark etc.

We host the Samsung Media Innovation Lab for Education (SMILE) and the Center for Applied Game Research's Game Lab (CEAGAR)

### PUBLICATIONS

#### IMPORTANT PUBLICATIONS

- › [Motivated learning through production-oriented game development](#)
- › [Hooked! – evaluating engagement as continuation desire in...](#)
- › [The Player Engagement Process...](#)
- › ["Sure, I Would Like to Continue" a method for mapping...](#)
- › [Older adults eating together in a virtual living room: opportunities and...](#)



**AALBORG UNIVERSITY**  
DENMARK

### KEY PROJECTS

#### VIZARTS

The "Visualizations and Adaptive Real-Time Storytelling" project is for media-tech researchers, filmmakers and techies who explore the future of real-time filmmaking, virtual production and interactive storytelling together. Supported by Nordisk Film Fund.

#### STRENGTHENING THE ROBUSTNESS AND MENTAL HEALTH OF HIGH SCHOOL STUDENTS

In order to keep technical high school students motivated to continue their studies, we conducted research on their engagement and designed activities aimed at heightening their well-being. Supported by Region Zealand.

#### ELDORADO

Preventing malnourishment and promoting well-being for elderly at home through mixed reality. Eating together in mixed reality - while being apart. Granted by Innovation Fund Denmark.

### VIDEO PRESENTATION



### CONTACT

#### CONTACT PERSONS

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