Special Session - Students on Game Immersion Workshop

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Special Session—Students on Game Immersion Workshop

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***Abstract*—This special session will provide an active forum for presentations and discussions on projects and vision related to the use of video games for addressing Sustainable Development Goals (UN SDG's). The projects are the outcome of the latest development game jam projects from the Games Immersion Conference (G.I.CON) 2021 hosted in April 2021 in iLRN Virtual Campus. All projects were developed by group of university students with reference point to address "Life of the Future "using dedicated UN SDG's. The panelists leading the event have extensive experience in immersive technologies and SDG's applied within games. The workshop will follow a mixed format. Including learning outcomes form latest student G.I.CON conference, project presentation, awards for best game concepts and hand-on activity for exploiting future trends behind student immersion engagement activities.**

***Index Terms*—education, virtual reality, augmented reality, sustainable goals, style**

I. INTRODUCTION

United Nations Sustainable Development Goals (UN SDG's) are a collection of 17 global goals designed by the United Nations General Assembly to be a "blueprint to achieve a better and more sustainable future for all." With the support of Video Games Industry, there is an effective approach for achieving serious goals of various kinds as a blueprint of a powerful communication to help a diversify community of people, from young children to adults to achieve a better and more sustainable future for all. Engaging young generation of learners from various university levels in research based cross-disciplinary projects, can be the path to establish future knowledge and build the mindset that promotes Gender Equality and Climate Action.

II. PANELIST DESCRIPTION AND SESSION PLAN

A. Panel Description

The panel will follow a mixed format of presentations and hands-on participant activity. It will be coordinated from both authors of this work. Activity one will offer a small introductory presentation from the panelists about the principles of G.I.CON and iLRNFuser, the engagement and networking opportunities. It will follow with a presentation from the groups participated in iLRNFuser2021 project outcomes. Presentations will include video samples, details of how each team approached the UN Sustainable Goals targeted and future game expansions. This will be followed by an award ceremony for the winning teams for the iLRNFuser2021. The final part of the panel, spanning 20-30 minutes, will consist of a short hands-on interactive session with the audience. In this the panelists will address the future stages to expand the students game immersion events with presentation of the survey's outcomes and live feedback from the audience. The detailed timetable of the panel is presented in Table I. Standard time-keeping practices will be maintained through the session. Main facilitators will be warning presenters prior to the end of their timeslots.

TABLE I. SCHEDULE

Panel Agenda and Schedule			
Title of Activity	**Type of Activity**	**Presenter/ Facilitator**	**Duration (minutes)**
Introduction to G.I.CON and iLRNFuser activities	Presentation	Markos Mentzelopoulos	10
Applications developed – State of UN Goals	Presentation	David-Bass Clark & Teams from iLRNFuser2021	20
Awards	Presentation	Markos Mentzelopoulos & David-Bass Clark	10
Future of G.I.CON and iLRNFuser	Hands-on participant activity	All	30

B. Panel Topics

Introduction to G.I.CON and iLRNFuser activities. This short presentation will outline the current structure of G.I.CON and iLRNFuser, the objectives of the events, and organizing team background. Furthermore, strategic partnerships aim will be presented as part of the stakeholder's feedback.

Applications developed – State of UN Goals. For this session, the second author of this work will present the importance of Unite Nations Sustainable Goals and application in gamifications, including leading research in topics. This will be followed by short 5min presentation of all groups that submitted work on the last game jam with descriptions of aims and objective of their prototypes, how they tackle specific UN

Goals and critics for the next stages of their work for expansion.

Awards. The third section of this workshop will be a presentation ceremony for the awards for the winning teams for the 2021 iLRNFuser. The awards will be presented by representatives from the institutions offering the distinctive awards.

C. Future of G.I.CON and iLRNFuser

In this hands-on participant activity, all participants will have the opportunity to interact with the panel, offer questions, provide proposals to improve the engagement activities with students and immersion and plan for next year's event. This session will be also an opportunity for academics and institutions that have not been included in this year's event to engage actively on this community and acquire details to participate for next series of event.

III. PANELIST CONTRIBUTIONS

The panel will consist of Markos Mentzelopoulos (MM) and David Bass-Clark (DB-C). Markos is a Senior Lecturer for the Computer Science & Engineering School (DCDI College), University of Westminster since August 2002. His research interests include: Content based sports video analysis and retrieval, semantic event detection, statistical methods and pattern recognition techniques for classification and modelling, tracking and recognition, man-machine interfaces, and serious games design. Markos has published articles in conferences and Journals and served as a program committee member in several international conferences within the multimedia and neural network scientific community such as IJCNN, ACM, ACVR. He has authored more than 40 scientific publications in journals and conferences several of which are in the field of technology enabled educational content creation and repurposing. From evaluating immersive Hardware [1], [2] to AR/VR applications for education [3], [4] and recently to technology frameworks for education [5], [6].

David Bass-Clark is the Director of AR/VR Research and Development at Unity College US. David is an educational technologist and XR strategist, evangelist, and innovator. His work focuses on XR experiences, immersive learning design, and innovative distance learning. Working at the intersection between emerging technology and education, David has designed and built learning experiences for a wide range of audiences from Portland, Maine to Shanghai, China. David is the co-leader of the NERCOMP Emerging Technology CoP and the co-chair of the Immersive Learning Research Network (iLRN) House of Nature and Environmental Science.

Markos Mentzelopoulos and David Bass-Clark will provide the current technologist's/practitioner's view on the challenges of bridging the gap between university student engagement on projects and theoretical concepts supporting sustainable UN goals.

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