AI in Immersive Environments

A Special Track of the
13th International Symposium on Visual Computing (ISVC'18)
http://www.isvc.net

November 19-21, 2018, Las Vegas, Nevada, USA

Scope:

Immersive environments are interactive, computer generated worlds where users are able to experience a simulated reality. Examples of these environments with various levels of immersion include augmented reality (AR), mixed reality (MR), virtual reality (VR), immersive digital environments, and gaming environments.

Artificial Intelligence (AI) and Machine Learning (ML) are being integrated into nearly all computing fields, including immersive environments. For example, computer vision is an essential component of mapping the environment needed for successful AR. Artificial agents are using path planning for navigation and reinforcement learning to learn new strategies in simulation and gaming. Human like interaction is being programmed into virtual reality environments using conversational deep learning and NLP. Realistic simulation for autonomous vehicles is being used to train ML techniques that transfer to the real world. These types of integration of AI in immersive environments are innovating the way we interact with the virtual world, as well as the world around us.

There are a number of challenges to be solved to improve immersion, perception, and integration of AI in immersive environments. The purpose of this special track is to advance the current state of the art in AI with respect to immersive environment technologies and to highlight successful applications.

Topics:

The topics of interest include, but are not limited, to the following areas:

- Computer Vision
- Deep Learning
- Object Recognition
- Reinforcement Learning
- Vision for Graphics

- Augmented Reality
- Mixed Reality
- Virtual Reality
- Virtual Humans and Artificial Life
- Collaborative Virtual Environments
- Immersive Gaming
- Game AI
- Simulation

Paper Submission Procedure:

Papers submitted to the Special Track must not have been previously published and must not be currently under consideration for publication elsewhere. Manuscripts should be submitted in camera-ready format and should not exceed **12 pages**, including figures and tables (see http://www.isvc.net for details). All papers accepted will appear in the symposium proceedings which will be published by **Springer-Verlag** in the **Lecture Notes in Computer Science (LNCS)** series.

Important Dates:

Paper Submissions	**July 2, 2018**
Notification of Acceptance	**August 13, 2018**
Final Camera Ready Paper	**September 17, 2018**
Advance Registration	**September 17, 2018**
ISVC Hotel Reservation	**October 19, 2018**
ISVC'18	**November 19-21, 2018**

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