

# Proceedings of the Joint Workshop on Intelligent Narrative Technologies and Workshop on Intelligent Cinematography and Editing

**INTWICED 2018**

Co-located with 14th AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment

Edmonton, 13-14 November 2018

Edited By  
Hui-Yin Wu, Mei Si, Arnav Jhala

# PREFACE

Narrative is a pervasive aspect of human culture in both entertainment and education. Historically, humans have been the primary agents behind the creation, telling, and adapting of narrative. However, as society's reliance on digital technology for both entertainment and communication increases, the need for more innovative approaches to represent, perform, and adapt narrative experiences increases as well. With recent research advances, computer systems now have the means to organize experiences into a narrative form enabling them to interact and communicate with human users in novel and intuitive ways. A computer system that possesses narrative intelligence can interact with and communicate with human users in novel and intuitive ways. The research presented through the Intelligent Narrative Technologies workshop represents the state of the art in the use of computational representation and reasoning about narrative for entertainment, communication, and education. The Workshop on Intelligent Cinematography and Editing represents advances in computational processing, representation, and education of predominantly visual and interactive narrative.

The academic research community is continuing to make advances in intelligent computing that bring these experiences closer to realizing the full potential of the computer as an interactive medium. The joint Intelligent Narrative Technologies and Intelligent Cinematography and Editing workshop at the 2018 AIIDE conference brings together participants from the two research communities and industry in an effort to create a channel of communication between interdisciplinary research and applications. One of the goals of the joint workshop was to explore the role of narrative intelligence in facilitating other forms of computer-based entertainment, education, and training. Narrative appears prominently in many forms of entertainment and interpersonal communication, including novels, movies, and machinima. Narrative can also play a role in education and training. Novel techniques for entertaining, training, and education have been developed in such fields as narrative understanding, narrative generation, storytelling, virtual cinematography, models of emotion, narrative cognition, and natural language generation.

The 2018 workshop is the first joint workshop in a successful sequence of symposia and workshops spanning over a decade. The two-day workshop featured a keynote and an invited talk, paper presentations, system demonstration posters, and a panel with experts from both the interactive narrative and intelligent cinematography communities on interdisciplinary topics.

Editors Hui-Yin Wu, Mei Si, and Arnav Jhala

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Stephen Ware, University of New Orleans

# PROGRAM

Tuesday, November 13, 2018

09:00 am - 09:10 am Opening

09:10 am - 10:30 am Keynote

William Bares: What do machines need to know to become better cinematic storytellers?

10:30 am - 11:00 am Coffee Break

11:00 am - 12:30 pm Session 1

Graeme Phillipson, Ronan Forman, Mark Woosey, Craig Wright, Michael Evans and Stephen Jolly  
Automated Analysis of the Framing of Faces in a Large Video Archive

Hui-Yin Wu and Arnav Jhala  
A Joint Attention Model for Automated Editing

David Thue and Elin Carstensdottir  
Getting to the Point: Resolving Ambiguity in Intelligent Narrative Technologies

12:30 pm - 02:00 pm Lunch

02:00 pm - 03:30 pm Session 2

Lara Martin, Srijan Sood and Mark Riedl  
Dungeons and DQNs: Toward Reinforcement Learning Agents that Play Tabletop Roleplaying Games

Yi-Chun Chen, Justus Robertson and Arnav Jhala  
Abstractions for Narrative Comprehension Tasks

Chris Martens  
Villanelle: Towards Authorable Autonomous Characters in Interactive Narrative

03:30 pm - 04:00 pm Coffee Break

04:00 pm - 05:30 pm Poster session

Anne-Gwenn Bosser, Ariane Ariane Bitoun, François Legras and Martín Diéguez  
(Poster) Co-constructing Subjective Narratives for Understanding Interactive Simulation Sessions

Azzam Althagafi, Hui-Yin Wu and Arnav Jhala  
(Poster) MIDB: A Web-Based Film Annotation Tool

Wednesday, November 14, 2018

09:00 am - 10:30 am Session 3

Hannah Morrison and Chris Martens

Making First Impressions: A Playable Model of Cross-Cultural Trust Building

Markus Eger and Kory Mathewson

dAIrector: Automatic Story Beat Generation through Knowledge Synthesis

Ingibergur Sindri Stefnisson and David Thue

(Invited talk from AIIDE) Mimisbrunnur: AI-assisted Authoring for Interactive Storytelling

10:30 am - 11:00 am Coffee Break

11:00 am - 12:30 pm Panel

12:30 pm - 01:00 pm Closing