Intelligent
Narrative Technologies

Papers from the AAAI Fall Symposium

Brian S. Magerko and Mark O. Riedl, Cochairs

Technical Report FS-07-05

AAAI Press
Menlo Park, California
## Contents

Preface / vii  
*Brian S. Magerko and Mark O. Riedl*

Rational Dialog in Interactive Games / 1  
*Maria Arinbjarnar*

Are We Telling the Same Story? Balancing Real and Virtual Actors in a Collaborative Story Creation System / 9  
*António Brisson, Ana Paiva*

S-MADE: Interactive Storytelling Architecture through Goal Execution and Decomposition / 17  
*Yundong Cai, Zhiqi Shen, Chunyan Miao, Ah-Hwee Tan*

The Story Molecule: Narrative as Information / 21  
*Beth Cardier*

How Can We Be Serious in a Game? / 25  
*João Catarino, Tiago Moreiras, Pedro Faria Lopes, Joaquim Esmerado, Isabel Machado Alexandre*

A Platform for Symbolically Encoding Human Narratives / 29  
*David K. Elson, Kathleen R. McKeown*

Generating Educational Tourism Narratives from Wikipedia / 37  
*Brent Hecht, Nicole Starosielski, Drew Dara-Abrams*

Emotion Discourse as Design Heuristic: Creating Emotional Intelligence for Virtual Narrative Agents / 45  
*David Herman, Joshua Steskal*

Psychopathology, Narrative, and Cognitive Architecture (or: Why AI Characters Should Be Just as Screwed-up as We Are) / 49  
*Ian Horswill*

An Authoring Tool for an Emergent Narrative Storytelling System / 55  
*Michael Kriegel, Ruth Aylett, João Dias, Ana Paiva*

Building Synthetic Actors for Interactive Dramas / 63  
*Sandy Louchart, Ruth Aylett*

Collaborative Narrative Generation in Persistent Virtual Environments / 71  
*Neil Madden, Brian Logan*

Measuring Dramatic Believability / 79  
*Brian Magerko*

Driving Interactive Drama Research through Building Complete Systems / 83  
*Manish Mehta, Santiago Ontañón, Ashwin Ram*
Ordering Events in Interactive Fiction Narratives / 87
Nick Montfort

Understanding Goal-Based Stories through
Model Finding and Planning / 95
Erik T. Mueller

A Computer Model for Visual-Daydreaming / 102
Rafael Pérez y Pérez, Ricardo Sosa, Christian Lemäître

Affective Storytelling Based on Characters' Feelings / 110
David Pizzi, Marc Cavazza

Using Feature Value Distributions to Estimate Player
Satisfaction through an Author's Eyes / 118
David L. Roberts, Christina R. Strong, Charles L. Isbell

Narrative Presence in Intelligent Learning Environments / 126
Jonathan P. Rowe, Scott W. McQuiggen, James C. Lester

The Tale of Peter Rabbit: A Case-Study in Story-Sense Reasoning / 134
Malcolm Ryan, Nicholas Hannah, Joshua Lobb

Drama Management Evaluation for Interactive Fiction Games / 138
Manu Sharma, Santiago Ontañón, Manish Mehta, Ashwin Ram

Emergent Story Generation: Lessons from
Improvisational Theater / 146
Ivo Swartjes, Joost Vromen

Affective Interaction Design and Narrative Presentation / 150
Joshua Tanenbaum, Angela Tomizu

Learning Player Preferences to Inform Delayed Authoring / 158
David Thue, Vadim Bulitko, Marcia Spetch, Eric Wasylishen

Narrative Presentation and Meaning / 162
Emmett Tomai, Kenneth D. Forbus

The Limitations of a Propp-based Approach
to Interactive Drama / 166
Zach Tomaszewski, Kim Binsted

A Genre-Independent Approach to Producing Interactive
Screen Media Narratives / 173
Marian F. Ursu, Jonathan J. Cook, Vilmos Zsombori, Ian Kegel