Table of Contents

Foreword

Preface

Acknowledgments

Chapter 1
On Vision-based Human-centric Virtual Character Design: a Closer Look at the Real World from a Virtual One
  Eugene Borovikov, Ilya Zavorin, and Sergey Yershov, PercepReal, USA

Chapter 2
Integrating ACT-R Cognitive Models with the Unity Game Engine
  Paul Richard Smart, University of Southampton, GB
  Tom Scutt, Mudlark, GB
  Katia Sycara, School of Computer Science, CMU, USA
  Nigel R Shadbolt, University of Oxford, GB

Chapter 3
A Graphical Tool for the Creation of Behaviors in Virtual Worlds
  Andrea Corradini, Design School Kolding, DK
  Manish Mehta, Accenture Technology Lab, USA

Chapter 4
Learned Behavior: Enabling Believable Virtual Characters Through Reinforcement
  Jacquelyne Forgette and Michael James Katchabaw, Western University, CA

Chapter 5
Personality-based Cognitive Design of Characters in Virtual Environments
  Maryam Saberi, Simon Fraser University, CA

Chapter 6
The Contemporary Craft of Creating Characters Meets Today's Cognitive Architectures -- A Case Study in Expressivity
  Selmer Bringsjord, RPI, USA

Chapter 7
Virtual SOAR-Agent Implementations: Examples, Issues and Speculations
  Jeremy Owen Turner, Simon Fraser University, CA

Chapter 8
Towards Truly Autonomous Synthetic Characters with the Sigma Cognitive Architecture
  Volkan Ustun, Institute for Creative Technologies, University of Southern California, USA
  Paul S Rosenbloom, University of Southern California, USA
Chapter 9
A Universal Architecture for Migrating Cognitive Agents: A Case Study on Automatic Animation Generation

Kaveh Hassani and Won-Sook Lee, University of Ottawa, CA

Chapter 10
Game AGI beyond Characters

Alexander Zook, Georgia Institute of Technology, USA

Compilation of References

About the Contributors