

Selected Topics

Daniel E. Bruce

October 4, 2011

Contents

| | | |
|----------|---------------------------------|----------|
| 1 | Introduction | 2 |
| 2 | Related work | 3 |
| 2.1 | Game AI | 3 |
| 2.1.1 | Techniques | 3 |
| 2.1.2 | Entertainment value | 3 |
| 2.2 | Automatic Programming | 3 |
| 3 | Conclusion | 4 |

Chapter 1

Introduction

This document covers a selection of the most relevant previous work related to my Thesis.

There are two main areas that have to be covered, specifically the topics of Artificial Intelligence in games, divided into AI implementation techniques and AI entertainment value, and Automatic Programming.

There is also some work that relates to the specific topic of using Automatic Programming to improve game AI, either for skill or entertainment value.

Chapter 2

Related work

2.1 Game AI

The work existing on the topic of Artificial Intelligence in games can be roughly divided between work describing various implementation techniques, and work describing how to make game AI more entertaining within the constraints of existing implementation techniques.

The line between these two subtopics is very fuzzy and gradual, so some judgment has been employed when putting the work into one category or the other, in some cases the choice is purely symbolical, such as when the work describes a new implementation technique created for the express purpose of increasing entertainment value, such as in Mateas and Stern (2002).

2.1.1 Techniques

2.1.2 Entertainment value

2.2 Automatic Programming

Chapter 3

Conclusion

Bibliography

M. Mateas and A. Stern. A behavior language for story-based believable agents. *AAAI Spring Symposium Series*, 2002. <http://www-2.cs.cmu.edu/~michaelm/publications/AI-IE2002.pdf>.