

Title: Artificial Emotions in Virtual Storytelling

Author: Michal Bída

Department: Department of Software and Computer Science Education, Faculty of Mathematics and Physics, Charles University

Supervisor: MSc. Cyril Brom, PhD., Department of Software and Computer Science Education, Faculty of Mathematics and Physics, Charles University

Abstract: This thesis is concerned with Interactive Digital Storytelling (IDS) from two perspectives. Firstly, it analyses the problem of the development of IDS systems and defines behavioral requirements for the agents in those systems. The first part is concluded with a proposal of a minimalistic affect-modulated architecture that can be used to develop agents for medium-sized IDS systems. Secondly, two working IDS systems built on top of the architecture are introduced and used in the following part of the thesis that researches the problem of an automatic analysis of story spaces generated by IDS systems. A general methodology of analysis is introduced, implemented and tested on the domains of three working IDS systems.

Keywords: interactive digital storytelling, agent architecture, believability, emotions, drama analysis