Detailed Table of Contents

this segregation, which is a product of old and new media specificity and narrow notions of specialization.

This chapter illustrates the reaction to the preservation and conservation of software-based media art and summarizes the crucial ideas and questions that involve this emergent area of conservation. The chapter analyzes the role in which conservators explore the impact of the method, attitudes to change, technology obsolescence, and the influence of the how the artist imagines and understands their practice on the conservation of these works as they enter the exhibition space. In addressing the conservation of software-based media art, this chapter highlights the variety of knowledge and expertise required: expertise that is personified in the teamwork of those who support these functions. The author completes the chapter by recommending that developing and maintaining these efforts has become a crucial part of the software-based media conservator's role.

Aiming to explore the diverse nature of sound and image, thereby establishing a bridge with the symbiotic creation of sensations and emotions, this chapter intends to present the development and the construction of a proposal for the confluence between materiality and immateriality in site-specific sound and visual performances. Using as a focal point sound and visual narratives, the author tries to look beyond space and time and create a representative atmosphere of sense of place, attempting to understand the past and sketching new configurations for the (re)presentation of identity, guiding the audience through a journey of perceptual experiences, using field recordings, ambient electronic music, and videos. This chapter also presents the development of an experimental approach, based on a real-time sound and visual performance, and some critical forms of expression and communication that relate or incorporate sound and image, articulating concerns about their aesthetic experience and communicative functionality.

Despite all the technological advances in the field of computer graphics, the uncanny valley effect is still an observed phenomenon affecting not only how animated digital characters are developed but also the audience's reaction during a film session. With the emergence of computer-generated images being used in films, this chapter aims at presenting a multidisciplinary approach concerning the uncanny valley topic. This phenomenon is mainly explained by several psychological theories based on human perception; however, this chapter contributes to the discussion presenting a communication perspective based on the uses and gratification theory connected to the genre theory proposed by Daniel Chandler. In addition, the authors discuss how the technological evolution in rendering is helping out artists to cross the valley, which ends up being unveiled only by motion. As a result of this technical evolution, it is proposed a new animation art style category defined as quasi-real.

The research and development of an augmented reality (AR) application for Vancouver-based dance company Small Stage challenged a team of students at a graduate digital media program to understand how AR might reinvent the audience-dancer relationship. This chapter will chronicle the AR and choreographic development process that occurred simultaneously. Based on the documentation of that process, a number of insights emerged that dance creators and AR developers may find useful when developing an AR experience as counterpart to a live dance production. These include (1) understanding the role of technology to support or disrupt the traditional use of a proscenium-based stage, (2) describing how AR can be used to augment an audience's experience of dance, (3) integrating a motion capture pipeline to accelerate AR development to support the before and after experience of a public dance production.

Art has a power different from all other human actions; it can produce a variety of human emotions like nothing else. The main purpose of this chapter is to study the relation between media arts and emotions. Virtual environments are increasingly being used by artists; the use of immersive environments allows the media art artist to go further than express himself, allows that through contemplation and interaction the participant also becomes part of the artistic artefact. Immersive environments can induce emotional changes capable of generating states of empathy. Considering an immersive environment as a socio-technical system, where human and non-human elements interact, establishing strong relationships, the authors used actor-network theory as an approach to design an immersive artifact of digital media art. The use of neurofeedback mechanisms during the participant's exposure to immersive environments opens doors to new types of interaction, allowing to explore emotional states to generate empathy.

Chapter 8

This chapter describes the development of a prototype of a serious video game and its maintenance platform for the geo-education in the Arouca Geopark Territory. This serious video game, which is the focus of this project, aims to assist the guides in their visits to the Arouca Geopark, providing an educational and modular tool. It was possible to supply some needs of the Arouca Geopark, identifying which

components are necessary for this platform and which tools must be used for its development. A functional prototype of this platform was developed and subjected to usability tests, the results of which were positive and revealed great acceptance by the intervening group. With the development of this technology, it is intended that the guides and visitors of Arouca Geopark can enjoy an educational tool, able to help guides to provide more stimulating guided tours, thereby improving visitors' retention of information.

Chapter 9

As mobile technology sustains exponential growth and spread to all aspects of our everyday life and smartphone computational power increases, new promises arise for cultural institutions and citizens to use these tools for promoting cultural heritage. This survey proposes to review available smartphone applications (apps) relating to cultural heritage in three different contexts: cities, street art, and museums. Apps were identified by searching two app stores: Apple's App Store and Google Play (Android). A data search was undertaken using keywords and phrases relating to cities, street art, and museums. A total of 101 apps were identified (Google Play only= 7, Apple App Store only = 26, both Google Play and Apple App Store = 61, Apple Web Store and Web App = 6). Apps were categorized into the following categories: museums (39), street art (30), and cities (32). The most popular features are photos (96%) and maps (79%), and the most uncommon the 360 (4% – only in museums apps), games (6%), and video (15%).