



METADATA

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Abstract

Virtual worlds are three-dimensional synthetic environments on a computer in which multiple users appear as “avatars” (avatars) communicate with each other or with other synthetic entities, explore and interact with the environment, and construct new content. Today, they are the most widespread implementation of Virtual Reality theories and techniques and find various areas of application, such as education, training and simulation, culture, entertainment, and collaborative work. There are many available platforms and tools for developing Virtual Worlds, with significant differences in terms of available features and technical characteristics. An emerging environment is Open Simulator, which is based on the technology of the popular Second Life and is also a free and open source software product (FOSS), meaning that any user can install, configure, and manage their own Virtual World. The

subject of this book is the latest developments, technologies, and applications of Virtual Worlds. The aim of the book is to provide the reader with: a) an understanding of the imaging, motion, and simulation technologies used by Virtual Worlds, b) an understanding of the methods and techniques of design, development, and evaluation, c) awareness of the most important areas of application and their specific requirements, d) training in the installation, management, and development of content in an Open Simulator environment. The book consists of two parts. The first part (Chapters 1-6) includes the theoretical section: technologies, development methods, and applications of VCs. The second part (Chapters 7-12) concerns learning the Open Simulator environment and the LSL/OSSL scripting language through the construction of complex interactive environments in various areas of application.

