1. Record Nr. UNINA9910254847003321 Autore Cassol Vinícius J **Titolo** Simulating Crowds in Egress Scenarios [[electronic resource] /] / by Vinícius J. Cassol, Soraia R. Musse, Cláudio R. Jung, Norman I Badler Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2017 **ISBN** 3-319-65202-8 Edizione [1st ed. 2017.] 1 online resource (VIII, 107 p. 55 illus., 47 illus. in color.) Descrizione fisica 003.3 Disciplina Computer simulation Soggetti Optical data processing User interfaces (Computer systems) Software engineering Simulation and Modeling Image Processing and Computer Vision User Interfaces and Human Computer Interaction Software Engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto Introduction -- Background Review -- Crowd Simulation -- Case Studies -- Crowd Analysis Based on Computer vision -- Final Remarks. . Sommario/riassunto This book describes from a computer science viewpoint the software, methods of simulating and analysing crowds with a particular focus on the effects of panic in emergency situations. The power of modern technology impacts on modern life in multiple ways every day. A variety

methods of simulating and analysing crowds with a particular focus on the effects of panic in emergency situations. The power of modern technology impacts on modern life in multiple ways every day. A variety of scientific models and computational tools have been developed to improve human safety and comfort in built environments. In particular, understanding pedestrian behaviours during egress situations is of considerable importance in such contexts. Moreover, some places are built for large numbers of people (such as train stations and airports and high volume special activities such as sporting events). Simulating Crowds in Egress Scenarios discusses the use of computational crowd simulation to reproduce and evaluate egress performance in specific

scenarios. Several case studies are included, evaluating the work and different analyses, and comparisons of simulation data versus data obtained from real-life experiments are given.