1. Record Nr. UNINA9910255003203321 Autore Lazzarini Victor **Titolo** Csound: A Sound and Music Computing System / / by Victor Lazzarini, Steven Yi, John ffitch, Joachim Heintz, Øyvind Brandtsegg, lain McCurdy Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2016 **ISBN** 3-319-45370-X Edizione [1st ed. 2016.] 1 online resource (XXX, 516 p. 125 illus., 12 illus. in color.) Descrizione fisica 004 Disciplina Application software Soggetti Music Signal processing Image processing Speech processing systems User interfaces (Computer systems) Computer Appl. in Arts and Humanities Signal, Image and Speech Processing User Interfaces and Human Computer Interaction Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Music Programming Languages -- An Introduction to the Csound System -- Key Concepts, Abstractions: Instruments, Events --Variables, Signals, Opcodes -- Advanced Data Types: Strings and Arrays -- Control of Flow and Scheduling -- Creating Signal Graphs and Busses -- User-Defined Opcodes -- The Numeric Score -- MIDI Input and Output -- Open Sound Control and Networking -- Scripting Control I: Python -- Scripting Control II: Clojure -- Classic Synthesis --Time-Domain Processing -- Spectral Processing -- Granular Techniques -- Physical Models -- Composition Case Studies. Sommario/riassunto This rigorous book is a complete and up-to-date reference for the Csound system from the perspective of its main developers and power users. It explains the system, including the basic modes of operation and its programming language; it explores the many ways users can

interact with the system, including the latest features; and it describes

key applications such as instrument design, signal processing, and creative electronic music composition. The Csound system has been adopted by many educational institutions as part of their undergraduate and graduate teaching programs, and it is used by practitioners worldwide. This book is suitable for students, lecturers, composers, sound designers, programmers, and researchers in the areas of music, sound, and audio signal processing. "Today, Csound is in my opinion the most powerful and general program for sound synthesis and processing. Moreover, it is likely to endure, since it is maintained and developed by a team of competent and dedicated persons. The authors of this book are part of this team: they are talented software experts but also composers or sound designers. The book reviews the programs which culminated in the present Csound, and it explains in full detail the recent features. It can thus serve as both an introduction to Csound and a handbook for all its classic and novel resources." [Jean-Claude Risset].