

Communications & Multimedia Lectures
Inst. Telecommunication and Multimedia Applications - Universitat Politècnica de València

Invited lecture

CREATING IMAGES AND MUSIC WITH CODE AND INTERACTION

Prof. Roger Dannenberg

Professor of Computer Science, Art, and Music
School of Computer Science, Carnegie Mellon University (USA)

Date: **December 13th, 2016** || Hour: **11:30 - 13:30 h**

Location: **Conference room, Building 8E (Yellow Cube), Access G, 3rd floor**, Universitat Politècnica de València, Camino de Vera s/n, 46022 Valencia. (<http://www.upv.es/plano/plano-2d-es.html>)

Abstract

Mankind has always been fascinated by mechanical simulations of human activity. A characteristic of Western thought is to understand our minds, bodies, and our world in mechanistic terms. Music especially has been viewed as a mathematical and mechanical process. As a result, musicians, scientists, and engineers have devised all sorts of mechanisms and systems for composing and performing music. I will review some of these activities their evolution over the last 2000 years, ending with some recent findings on how a human audience relates to humanoid robot performers and how music can be composed by computers.

Short Biography

Roger B. Dannenberg, Professor of Computer Science, Art, and Music at Carnegie Mellon University, is a pioneer in the field of Computer Music. His work in computer accompaniment led to three patents and the SmartMusic system now used by over one hundred thousand music students. He also played a central role in the development of the Piano Tutor and Rock Prodigy, both interactive, multimedia music education systems, and Audacity, the audio editor used by millions. Dannenberg is also known for introducing functional programming concepts to describe real-time behavior, an approach that forms the foundation for Nyquist, a widely used sound synthesis language. As a composer, Dannenberg's works have been performed by the Pittsburgh New Music Ensemble, the Pittsburgh Symphony, and at many international festivals. As a trumpet player, he has collaborated with musicians including Anthony Braxton, Eric Kloss, and Roger Humphries, and performed in concert halls ranging from the historic Apollo Theater in Harlem to the Espace de Projection at IRCAM. Dannenberg is active in performing jazz, classical, and new works.

More info: <http://musicaelectronica.blogs.upv.es>

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