

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

Invited lecture

MUSIC UNDERSTANDING AND FUTURE MUSIC SOFTWARE

Prof. Roger Dannenberg

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

Date: **March 8th, 2016** || Hour: **12:30 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

Music understanding by computer has found many applications, ranging from music education to intelligent real-time machine performance. I will describe how current research might impact the very nature of music in the future through music understanding by computer, music education applications, computer support for popular music performance, and intelligent music displays. One of the trends in future music software is to give users greater creative power through modular "construction kits." I will illustrate this using SoundCool and work from Carnegie Mellon on Human-Computer Music Performance.

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.

Prof. Dannenberg will also teach a 3-day workshop on Electronic Music and Video Creation and will give a concert on Thursday 10th, 19h at the Auditori Alfons Roig of the Facultat de Belles Arts (UPV). More info: <http://musicaelectronica.blogs.upv.es>

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