**University of Rochester**
**Department of Electrical and Computer Engineering**
**Colloquia Series**

# Crowdsourcing Audio Production Interfaces

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**Wednesday, April 13th**
**12:00PM – 1:00PM**
**Computer Studies Building (CSB) 209**

Abstract: Potential users of audio production software, such as audio equalizers, may be discouraged by the complexity of the interface and a lack of clear affordances in typical interfaces. We seek to simplify interfaces for task such as audio production (e.g. mastering a music album with ProTools), audio tools (e.g. equalizers) and related consumer devices (e.g. hearing aids). Our approach is to use an evaluative paradigm ("I like this sound better than that sound") and the use of descriptive language (e.g. "Make the violin sound 'warmer.'"). To build interfaces that use descriptive language, a system must be able to tell whether the stated goal is appropriate for the selected tool (e.g. making the violin "warmer" with a panning tool does not make sense). If the goal is appropriate for the tool, it must know what actions need to be taken (e.g. add some reverberation). Further, the tool should not impose a vocabulary on users, but rather understand the vocabulary users prefer. In this talk, Prof. Pardo describes recent work in evaluative interfaces (SynthAssist), crowdsourcing a vocabulary for language-based production tools (SocialEQ) and language-based interfaces for production tools (Reverbalize).

Bio: Bryan Pardo, head of the Northwestern University Interactive Audio Lab, is an associate professor in the Northwestern University Department of Electrical Engineering and Computer Science. Prof. Pardo received a M. Mus. in Jazz Studies in 2001 and a Ph.D. in Computer Science in 2005, both from the University of Michigan. He has authored over 80 peer-reviewed publications. He has developed speech analysis software for the Speech and Hearing department of the Ohio State University, statistical software for SPSS and worked as a machine learning researcher for General Dynamics. While finishing his doctorate, he taught in the Music Department of Madonna University. When he's not programming, writing or teaching, he performs throughout the United States on saxophone and clarinet at venues such as Albion College, the Chicago Cultural Center, the Detroit Concert of Colors, Bloomington Indiana's Lotus Festival and Tucson's Rialto Theatre.

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