

University of Rochester
Department of Electrical and Computer Engineering

When Machine Learning Takes over Audio Signal Processing

Dr. Paris Smaragdis

Wednesday, April 19th
12:00PM – 1:00PM
Computer Studies Building (CSB) 209

Abstract: During the last few years, machine learning has started to permeate the world of audio processing and has produced results that drastically improve over the state of the art. In this talk I'll touch on some recent approaches taking advantage of a machine learning perspective for attacking audio problems. I will show how traditional signal processing approaches can be reimagined using machine learning tools such as mixture models, matrix factorizations, deep learning regressions, and more.

Bio: Paris Smaragdis is an associate professor at the Computer Science and the Electrical and Computer Engineering departments of the University of Illinois at Urbana-Champaign, as well as a senior research scientist at Adobe Research. He completed his masters, PhD, and postdoctoral studies at MIT, performing research on computational audition. In 2006 he was selected by MIT's Technology Review as one of the year's top young technology innovators for his work on machine listening, in 2015 he was elevated to an IEEE Fellow for contributions in audio source separation and audio processing, and during 2016-2017 he is an IEEE Signal Processing Society Distinguished Lecturer. He has authored more than 100 papers on various aspects of audio signal processing, holds more than 40 patents worldwide, and his research has been productized by multiple companies.

Pizza and soda provided