



IEEE Greece Signal Processing Chapter

and UPatras - WCSN

ΠΡΟΣΚΛΗΣΗ ΣΕ ΔΙΑΛΕΞΗ

Την Τρίτη 24 Απριλίου 2012, 12:00μμ, στην αίθουσα I.12 του Συνεδριακού Κέντρου του Πανεπιστημίου Πατρών, θα πραγματοποιηθεί διάλεξη του Dr. James Johnston, IEEE Fellow και Distinguished Lecturer της IEEE Signal Processing Society. Ο Dr. James Johnston είναι από τους βασικούς θεμελιωτές σύγχρονων μεθόδων κωδικοποίησης ήχου (όπως π.χ το MP3).

Το θέμα της διάλεξης είναι:

"Beyond MP3 - What is left in audio?"

Η διάλεξη συνδιοργανώνεται από το IEEE Greece Signal Processing Chapter και το Ενδοπανεπιστημιακό Δίκτυο Έρευνας και Εφαρμογών σε Ασύρματα Δίκτυα Επικοινωνιών & Αισθητήρων (UPatras – WCSN).

Ακολουθεί βιογραφικό του ομιλητή και σύντομη περίληψη της ομιλίας.

Σύντομο βιογραφικό του ομιλητή:

James D. Johnston (IEEE Fellow) received his BSEE and MSEE from Carnegie-Mellon University. Dr. Johnston joined DTS Inc., from his position at Neural Audio. Prior to that, he worked for 5 years at Microsoft Corporation in the "Codecs", "Core Media Processing" and finally the video services groups as Audio Architect.

Dr. Johnston retired from AT&T Labs - Research, quartered at Florham Park, NJ, Speech Processing Software and Technology Research Department. Before that, he was employed by AT&T Bell Laboratories, in the Acoustics Research Department under Dr. J. L. Flanagan, and in the Signal Processing Research Department.

Dr. Johnston was the primary researcher and inventor of the MPEG-2 AAC audio coding algorithm, and a principle contributor to the "MP3" algorithm. He also represented AT&T in the ANSI accredited group X3L3.1, and X3L3.1 in the ISO-MPEG-AUDIO (MP3, AAC) arena.

Dr. Johnston was awarded the IEEE James L. Flanagan Signal Processing Field Award (2006); elected Fellow, Audio Engineering Society (1997); received AT&T Technology Medal and AT&T Standards Award (1998); received a New Jersey Inventor of the Year Award (2001); elected IEEE Fellow (2002).

Dr. Johnston's current research interests include acoustic scene modelling, loudspeaker design, loudspeaker pattern control, cochlear modelling, masking threshold models, stereo imaging models and stereo imaging sensitivity models, methods of reproducing soundfields either literally or perceptually, microphone and soundfield capture techniques, both actively steered and time-invariant, and speech and audio coding methods in general.

Τίτλος διάλεξης: Beyond MP3 - What is left in audio?

ABSTRACT:

In this talk the properties of the auditory system will be very briefly discussed, and then a variety of issues with both capture and presentation of real soundfields will be mentioned, along with the perceptual sensitivities that arise from the issues. In particular, the talk will focus on handling the perceptual cues that are required to provide a good sensation, rather than actually reproduce the soundfield in the playback venue. In some sense, this is an "MP3 spatial" discussion, although the methods are certainly different. The talk will last approximately 45 minutes. Questions are welcomed at any time during the presentation.

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