

## Meeting Summary 133rd Convention

### AES TC-AF

- Discussed successes and criticisms of AES46 conference on Audio Forensics based on feedback questionnaire which was administered during conference.

- Discussed developments toward 2014 conference to be held in London and co-chaired between Mark Huckvale and Jeff Smith.

133rd convention events:

#### Friday, October 26

10:00 – 12:00

- Workshop 1: *Forensic Authentication of Digital Audio* with Catalin Grigoras and Jeff M. Smith of the National Center for Media Forensics
- **Abstract:** Following the successful presentation of numerous papers on the subject of digital audio authentication at the recent 46th International Conference of the AES on Audio Forensics, this workshop will summarize and present the latest developments in the field. Digital audio authentication methods including data analysis, database management and validation, inter-laboratory testing, and methods for ENF analysis will be discussed. Dr. Catalin Grigoras and Jeff M. Smith of the National Center for Media Forensics will share research and findings related to these topics and explore implications that the latest developments mean for forensic audio analysis and digital media authentication.

2:00 – 4:00

- Tutorial 2: *Forensic Digital Data Analysis* with Doug Lacy of DL Technology
- **Abstract:** The analysis of digital audio is often required in forensics when the provenance of recorded material is in doubt or when carved material is recovered during investigations. Methods often involve spectral and statistical analyses to determine the nature of an audio recording but this event will explore additional analyses of the data that composes a digital audio file expanding on a recent workshop given at the 46th International Conference of the AES on Audio Forensics. Following a short introduction and demonstration of the classical “hex editor” that allows the viewing of the raw contents of a file, interpretation of a file's structure, analysis of embedded metadata that otherwise may not be apparent, and real case examples will be shared.

4:00 – 5:00

- Technical Committee on Forensic Audio meeting, room 124
- Open to all. On the agenda: 46<sup>th</sup> Conference summary, update on next 2014 audio forensics conference, discussion regarding proposed AES publication "Collected Papers on Forensic Audio," planning for upcoming workshops and tutorials.

#### Saturday, October 27

9:00 – 9:30

- Paper Presentation: *A Method for Enhancement of Background Sounds in Forensic Audio Recordings* by Rob Maher of Montana State University – Bozeman
- **Abstract:** A method for suppressing speech while retaining background sound is presented in this paper. The procedure is useful for audio forensics investigations in which a strong foreground sound source or conversation obscures subtle background sounds or utterances that may be important to the investigation. The procedure uses a sinusoidal speech model to represent the strong foreground signal and then performs a synchronous subtraction to isolate the background sounds that are not well-modeled as part of the speech signal, thereby enhancing the audibility of the background material.

12:30 – 2:00

- *Education and Career/Job Fair.* Visit the NCMF booth and chat with Jeff and Catalin about the online Master's in Media Forensics.