Proceedings of the 2ⁿᵈ International Workshop on the Internet of Sounds

2 September 2021

Online event organized by CIMIL, University of Trento

Papers published on ACM Digital Library

o   Iber, M., Dumphart, B., de Jesus Oliveira, V. A., Ferstl, S., M. Reis, J., Slijepčević, D., ... & Horsak, B. (2021). Mind the Steps: Towards Auditory Feedback in Tele-Rehabilitation Based on Automated Gait Classification. In *Audio Mostly 2021* (pp. 139-146).
DOI: https://doi.org/10.1145/3478384.3478398

o   Lostanlen, V., Bernabeu, A., Béchennec, J. L., Briday, M., Faucou, S., & Lagrange, M. (2021). Energy efficiency is not enough: towards a batteryless internet of sounds. In *Audio Mostly 2021* (pp. 147-155).
DOI: https://doi.org/10.1145/3478384.3478408

o   Kukushkin, M., & Ntalampiras, S. (2021). Automatic acoustic classification of feline sex. In *Audio Mostly 2021* (pp. 156-160).
DOI: https://doi.org/10.1145/3478384.3478385

o   Hollerweger, F. (2021). Streaaam: A fully automated experimental audio streaming server. In *Audio Mostly 2021* (pp. 161-168).
DOI: https://doi.org/10.1145/3478384.3478426

o   Hoy, R., & Van Nort, D. (2021). A Technological and Methodological Ecosystem for Dynamic Virtual Acoustics in Telematic Performance Contexts. In *Audio Mostly 2021* (pp. 169-174).
DOI: https://doi.org/10.1145/3478384.3478425

o   Vieira, R., & Schiavoni, F. (2021). Sunflower: an environment for standardized communication of IoMusT. In *Audio Mostly 2021* (pp. 175-181).
DOI: https://doi.org/10.1145/3478384.3478414

o   Font, F. (2021). SOURCE: a Freesound Community Music Sampler. In *Audio Mostly 2021* (pp. 182-187).
DOI: https://doi.org/10.1145/3478384.3478388

o   Thorn, S. (2021). Telematic wearable music: remote ensembles and inclusive embodied education. In *Audio Mostly 2021* (pp. 188-195).
DOI: https://doi.org/10.1145/3478384.3478386

o   Clester, I., & Freeman, J. (2021). Composing the Network with Streams. In *Audio Mostly 2021* (pp. 196-199).
DOI: https://doi.org/10.1145/3478384.3478416

o   Bullard, C., Kansal, A., & Freeman, J. (2021). Comparing Chat Methods for Remote Collaborative Live-Coding Music. In *Audio Mostly 2021* (pp. 200-203).
DOI: https://doi.org/10.1145/3478384.3478399

o   Zhao, W. (2021). Ubiquitous Music-Making Systems: A Critical Overview of Current Practices. *Audio Mostly 2021*, 204-207.
DOI: https://doi.org/10.1145/3478384.3478391

Awards

Best paper award:

Lostanlen, V., Bernabeu, A., Béchennec, J. L., Briday, M., Faucou, S., & Lagrange, M. (2021). Energy efficiency is not enough: towards a batteryless internet of sounds. In *Audio Mostly 2021* (pp. 147-155).

Best poster award:

Clester, I., & Freeman, J. (2021). Composing the Network with Streams. In *Audio Mostly 2021* (pp. 196-199).

Best demo award:

Font, F. (2021). SOURCE: a Freesound Community Music Sampler. In *Audio Mostly 2021* (pp. 182-187).

Best music award:

"The Global Hyperorgan: The TCP/Indeterminate Place Quartet performs with geographically far networked pipe organs" by Federico Visi, Mattias Petersson, Robert Ek and Stefan Östersjö

Programme

Day 2: September 2nd 2021

International Workshop on the Internet of Sounds Session: Internet of Audio Things Session chair: Mathieu Lagrange	
09:30 – 09:45	Michael Iber, Bernhard Dumphart, Victor-Adriel de Jesus Oliveira, Stefan Ferstl, Joschua M. Reis, Djordje Slijepčević, Mario Heller, Anna-Maria Raberger and Brian Horsak. *Mind the Steps: Towards Auditory Feedback in Tele-Rehabilitation Based on Automated Gait Classification.*
09:45 – 10:00	Vincent Lostanlen, Antoine Bernabeu, Jean-Luc Béchennec, Mikaël Briday, Sébastien Faucou and Mathieu Lagrange. *Energy Efficiency is Not Enough: Towards a Batteryless Internet of Sounds.*
10:00 – 10:15	Maksim Kukushkin and Stavros Ntalampiras. *Automatic acoustic classification of feline sex.*
10:15 – 10:30	Florian Hollerweger. *Streaaam: A fully automated experimental audio streaming server.*

International Workshop on the Internet of Sounds Session: Internet of Musical Things Session chair: Cristina Rottondi	
10:30 – 10:45	Rory Hoy and Doug Van Nort. *A Technological and Methodological Ecosystem for Dynamic Virtual Acoustics in Telematic Performance Contexts.*
10:45 – 11:00	Rômulo Vieira and Flávio Schiavoni. *Sunflower: an environment for standardized communication of IoMusT.*
11:00 – 11:15	Frederic Font. *SOURCE: a Freesound Community Music Sampler.*
11:15 – 11:25	Seth Thorn. *Telematic Wearable Music: Remote Ensembles and Inclusive Embodied Education.*
11:25 – 11:35	Ian Clester and Jason Freeman. *Composing the Network with Streams.*
11:35 – 11:45	Chad Bullard, Ananya Kansal and Jason Freeman. *Comparing Chat Methods for Remote Collaborative Live-Coding Music.*
11:45 – 11:55	Wei Zhao. *Ubiquitous Music-Making: A Critical Review.*

2ⁿᵈ International Workshop on the Internet of Sounds
(part of Audio Mostly 2021 - Virtual conference)

September 1-3, 2021

Call for papers and demos

After the success of the first edition, we are pleased to invite the community to submit to the 2ⁿᵈ International Workshop on the Internet of Sounds (IWIS 2021). The Internet of Sounds is an emerging research field positioned at the intersection of the Internet of Things and Sound and Music Computing domains. The workshop will run virtually.

The aim of the workshop is to bring together academics and industry to investigate and advance the development of Internet of Sounds technologies by using cutting-edge tools and processes. The event will consist of presentations from academics and keynotes, poster presentations, demonstrations, as well as tutorials.

Topics of interest include, but are not limited to, the following areas:

- Wireless acoustic sensor networks
- Detection and classification of sounds in acoustic sensor networks
- Visualization and Sonification of acoustic sensor networks
- Ecoacoustics
- Privacy and security in acoustic sensor networks
- Smart Musical Instruments
- Musical haptics for the Internet of Musical Things
- Participatory live music performances
- Networked music performances
- Music education applications for the Internet of Musical Things
- Intelligent music production in Internet of Musical Things contexts
- Ubiquitous music
- Web Audio for the Internet of Sounds
- Spatial audio for the Internet of Sounds
- Sonification for Internet of Sounds applications
- Protocols and exchange formats for the Internet of Sounds
- Improving accessibility and inclusiveness within the Internet of Sounds
- Open audio databases for Deep Learning and Data Mining
- Challenges in the management and delivery of large audio databases
- Visualization, access and indexing of audio databases
- Cloud-based services for musical and audio applications

We consider contributions in the form of a full paper (min 5 pages, max 8 pages), a poster paper (min 2 pages, max 4 pages), or a demo proposal (max 2 pages). Authors are welcome to submit to all three tracks. We encourage the submission of work in progress as well as more mature work.

The event is being run alongside the Audio Mostly Conference (https://audiomostly.com/) an interdisciplinary conference taking place between 1 and 3 of September. The participants to the workshop will have access to all the sessions of the Audio Mostly conference.

The paper templates are available at https://audiomostly.com/2021/call/instructions/

Important dates

- Papers and demos submission deadline: May 1, 2021
- Author notification: June 15, 2021
- Camera ready due: July 15, 2021
- Workshop dates: September 1-3, 2021

Publications

All accepted full papers will appear in the proceedings of the Audio Mostly Conference. They will be included in the ACM Digital Library and will be indexed by Scopus, ACM, Web of Science, and DBLP.

Awards

The Organizing Committee will select the winners for the Best Paper, Best Student Paper and Best Demo awards. To be eligible for the best student paper award, the presenting and first author of the paper must be a full-time student.

Organizing Committee

- Luca Turchet (University of Trento)
- Mathieu Lagrange (University of Nantes)
- Chris Chafe (Stanford University)
- Victor Lazzarini (Maynooth University)
- Carlo Fischione (KTH Royal Institute of Technology)
- Paolo Casari (University of Trento)

Sponsors

- Elk (www.elk.audio)
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Logistics

Registration: https://audiomostly.com/2021/info/registration/