

# **Exploring Urban Soundscapes:** Interactive Data Visualization with 'Urban Sound Diary'

Friday Nov 22, 2024 — 9:00 - 12:00 CHCHI 2024 Workshop by the SUSTech School of Design | Sound Studies Group



# **Workshop Description:**

This workshop seeks to engage participants in exploring and manipulating urban sound data utilizing the Urban Sound Diary application. Through the workshop, participants will (1) be introduced to the 'Urban Sound Diary' application and its functionalities; (2) acquire the relevant theoretical knowledge of audio analysis; (3) be encouraged to explore the urban soundscape through interactive data visualization in a creative manner; (4) gain insight into, and engage in discussions regarding the implications of the data in urban studies, sound studies, humancentered technology, interaction design, and social computing; (5) provide feedback on the application's usability and features for future enhancements.

# **Participants:**

3 to 10 participants

#### **Equipment Needed:**

A charged personal smartphone with a stable mobile internet connection.

#### Location:

Nanshan Intelligence Park, Building C1

#### **Target Audience:**

Researchers, urban planners, media artists, and practitioners interested in urban studies, data visualization, sound studies, mobile technologies, and interactive technologies.

#### Schedule:

09:00 - 09:15	Introduction of the project and background
09:15 - 10:00	Demonstration and walk through of the 'Urban Sound Diary'
10:00 - 10:30	Outdoor sound recording
10:30 - 10:45	Coffee break
10:45 - 11:15	Sound analysis, creative exploration using 'Urban Sound Diary'
11:15 - 12:00	Discussion of results, free sharing













# **Workshop Speaker:**

Xuehua Fu

(MSc Computer Science, KTH, Sweden; Researcher at SUSTech School of Design, Sound Studies Group)

Xuehua is a computer science researcher specialized in human-centered computing. Her current research interests include sound and music computing, multisensory perception, and human-computer interaction. Xuehua joined the Sound Studies Group in July 2024. She has been leading the development of the research project "The Big Voice" about datadriven studies of urban sounds in Shenzhen, in which the app 'Urban Sound Diary' was created.

### **Workshop Assistance:**

Zhaorui Liu, Jiayi Wen, Hao Zheng, Bocheng Zhong (SUSTech School of Design, Sound Studies Group)

#### **Project PI:**

Marcel Sagesser

Marcel Sagesser (PhD '21 Brown University) is an assistant professor at the SUSTech School of Design and is a sound and technology researcher, focusing on physical sonic matter, algorithms, and interactions between humans and technology. He is the co-director of the Sound Studies Group.

#### **Project Team Members:**

Marcel Sagesser, Xuehua Fu, Zhaorui Liu, Jiayi Wen, Hao Zheng (SUSTech), Jian Xiao (Zhejiang University), Mengyu Luo (ShanghaiTech University)

# **Acknowledgment:**

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