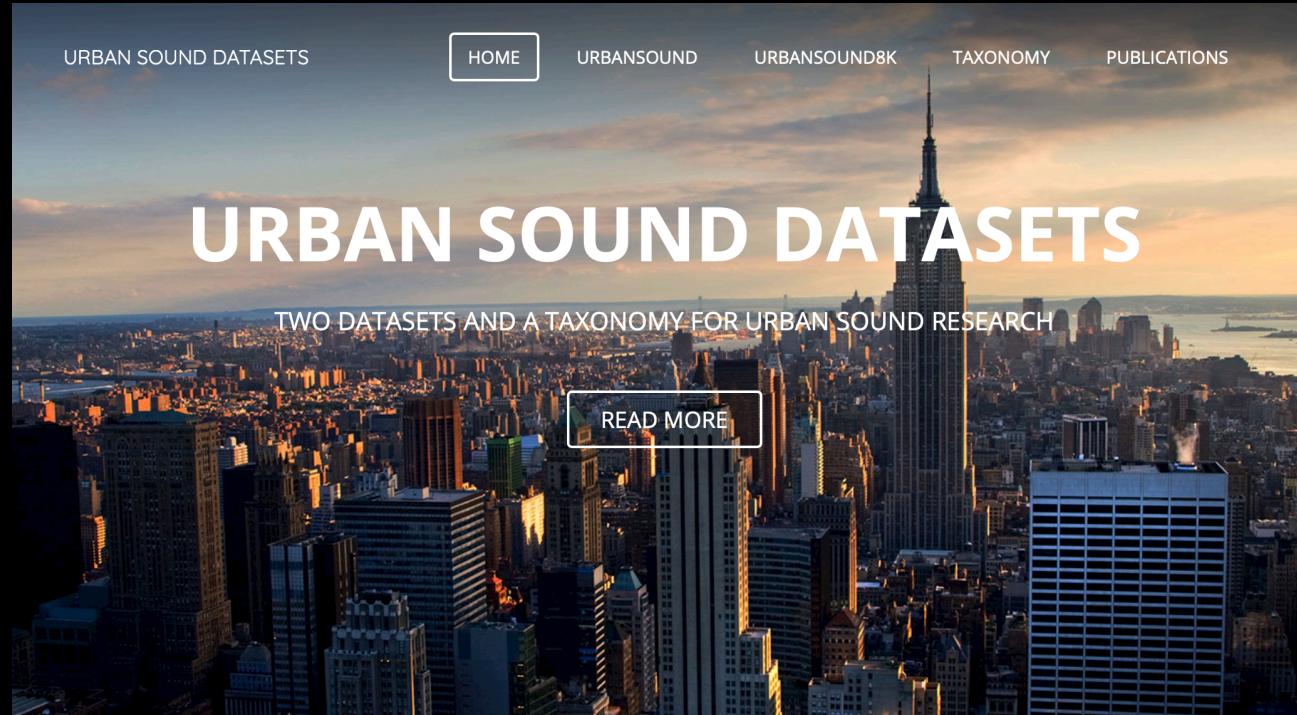


# Checking out the UrbanSound Dataset



David Goedicke and Wendy Ju





Welcome to the companion site for the [UrbanSound](#) and [UrbanSound8K](#) datasets and the [Urban Sound Taxonomy](#). Here you will find information and download links for the datasets and taxonomy presented in:

*J. Salamon, C. Jacoby and J. P. Bello, "[A Dataset and Taxonomy for Urban Sound Research](#)", 22nd ACM International Conference on Multimedia, Orlando USA, Nov. 2014.*

[[ACM](#)][[PDF](#)][[BibTeX](#)]

<https://urbansounddataset.weebly.com>



## About me

I am a research scientist and member of the Audio Research Group at [Adobe Research](#) in San Francisco. Previously I was a senior research scientist at the [Music and Audio Research Laboratory](#) and [Center for Urban Science and Progress of New York University](#).

My research focuses on the application of machine learning and signal processing to audio signals, with applications in machine listening, music information retrieval, bioacoustics, environmental sound analysis and open source software & data.

Here you'll find some information about my [research](#), [publications](#), [melody extraction](#), [code & data](#), [PhD thesis](#), [music](#), and some other possibly interesting stuff.

I grew up in Jerusalem, where I went to the Charles E. Smith high school for the arts, majoring in [music](#) (jazz guitar). Between 2004 and 2007 I studied for a Bachelors degree in Computer Science at the [University of Cambridge](#), UK, graduating with a First Class degree including awards for outstanding dissertation and achievement in a physical

### Recent news items

Scaper v0.2.0 released!



Time Lattice: A Data Structure for the Interactive Visual Analysis of Large Time Series



SONYC: A System for the Monitoring, Analysis and Mitigation of Urban Noise Pollution



Neural Net Pitch Tracking Algorithm CREPE Produces State-of-the-Art Results



Birdvox-full-night: A Dataset and Benchmark For Avian Flight Call Detection



What's Broken in Music Informatics Research?  
Three Uncomfortable Statements



Bioacoustics Datasets: A New Website Listing Bioacoustics Datasets and Repositories



OpenL3: A Competitive and Open Deep Audio Embedding

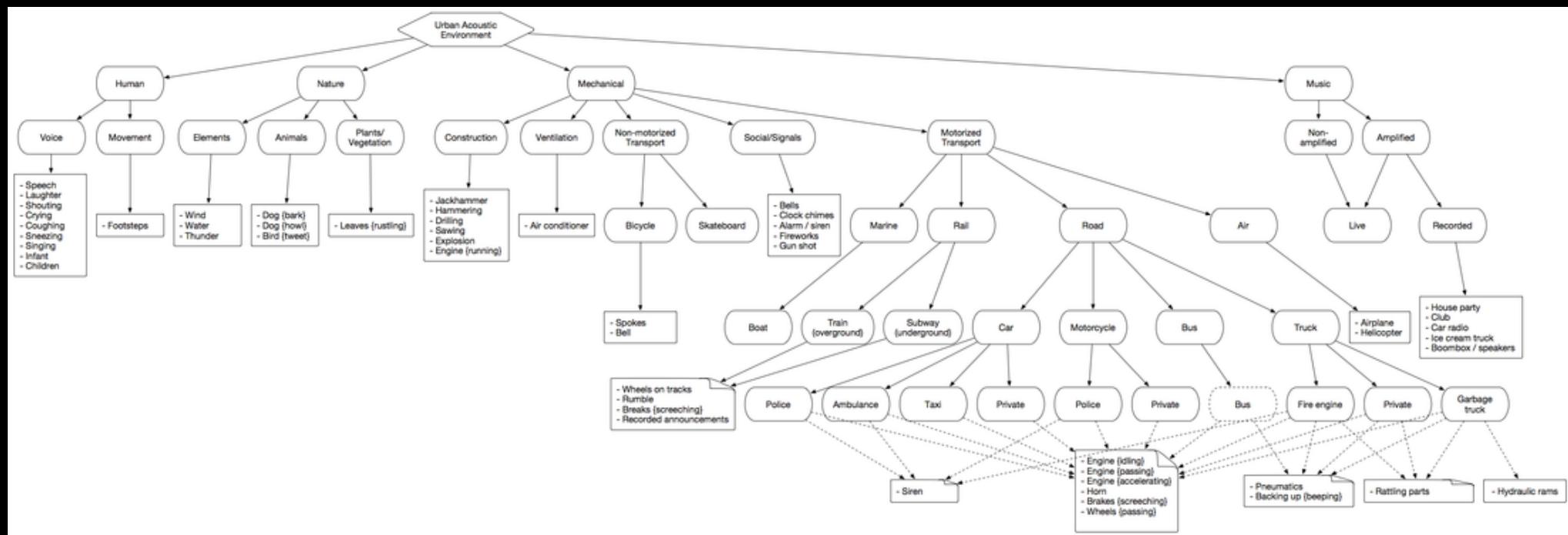
FeedGrabbr

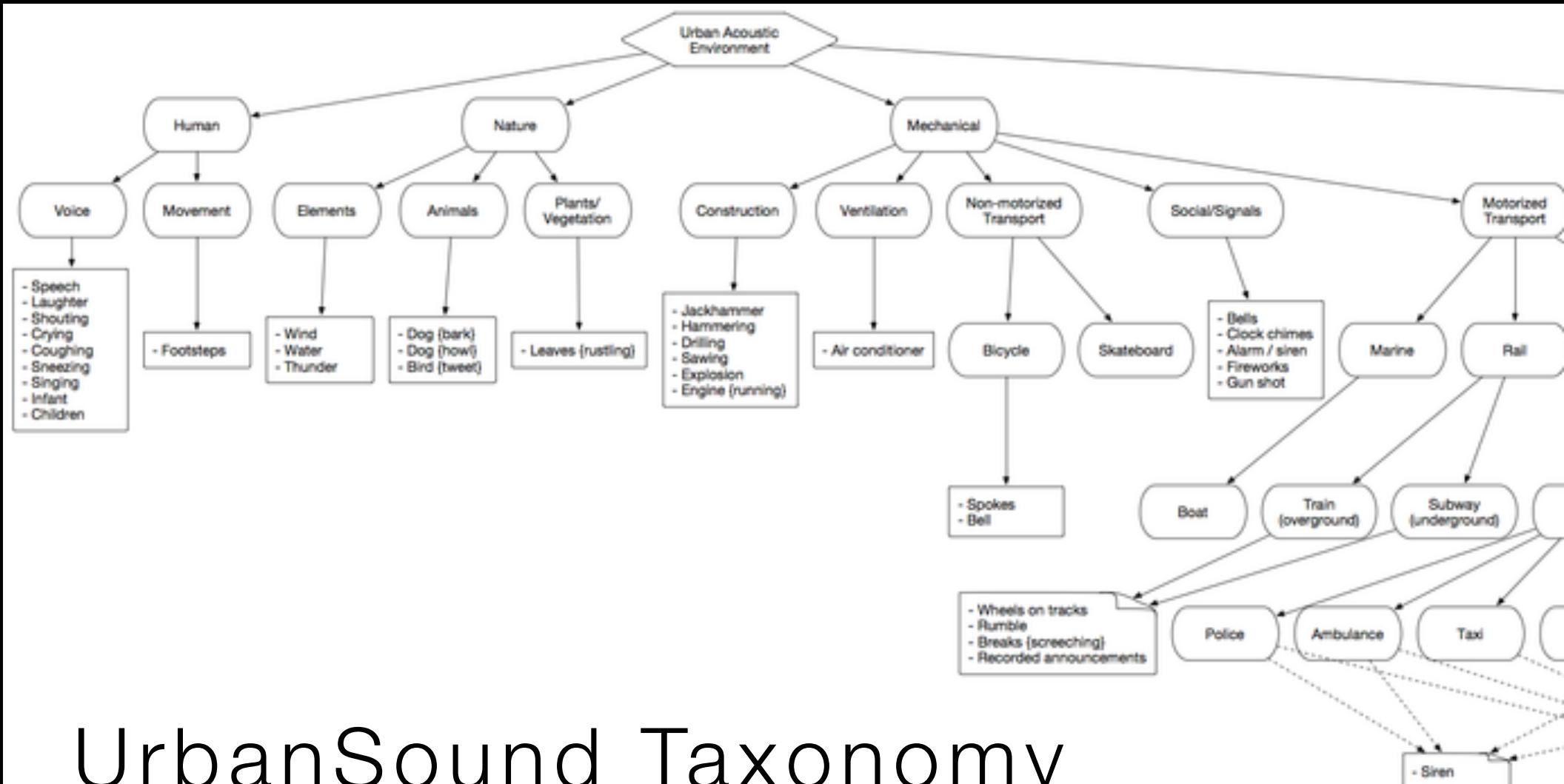
<http://www.justinsalamon.com>

In our view, an urban sound taxonomy should satisfy the following three requirements:

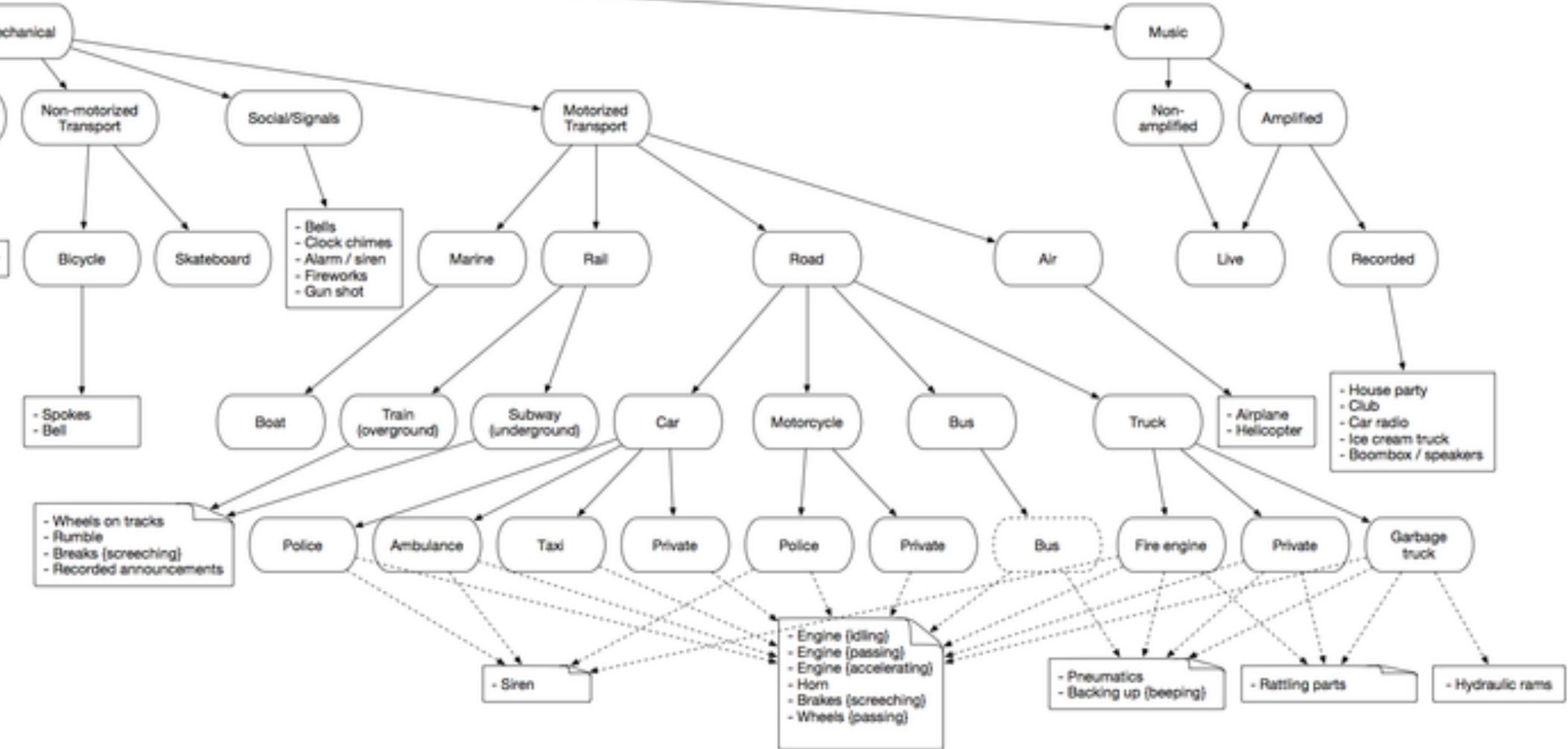
1. It should factor in previous research and proposed taxonomies.
2. It should aim to be as detailed as possible, going down to low-level sound sources such as “car horn” (versus “transportation”) and “jackhammer” (versus “construction”).
3. It should, in its first iteration, focus on sounds that are of specific relevance to urban sound research, such as sounds that contribute to urban noise pollution.

# UrbanSound Taxonomy





# UrbanSound Taxonomy



# UrbanSound Dataset

- This dataset contains 1302 labeled sound recordings.
- Each recording is labeled with the start and end times of sound events from 10 classes: air\_conditioner, car\_horn, children\_playing, dog\_bark, drilling, engine\_idling, gun\_shot, jackhammer, siren, and street\_music.

# UrbanSound Dataset

- Each recording may contain multiple sound events, but for each file only events from a single class are labeled.
- All recordings were obtained from [www.freesound.org](http://www.freesound.org). The files are pre-sorted into folders by the class of events that have been annotated for each file.
- In addition to the sound recordings, each audio file is accompanied by two metadata files: a JSON file containing the metadata provided by the Freesound API (description, tags, id, format, etc.); and a CSV file containing the sound event annotations.

# UrbanSound8K Dataset

- This dataset contains 8732 labeled sound excerpts (<=4s)
- Each recording is labeled with the start and end times of sound events from 10 classes: air\_conditioner, car\_horn, children\_playing, dog\_bark, drilling, engine\_idling, gun\_shot, jackhammer, siren, and street\_music.