# LEARNING INVARIANTS FOR POLYPHONIC INSTRUMENT RECOGNITION

First author Affiliation1

**Second author** Retain these fake authors in author1@ismir.edu submission to preserve the formatting author3@ismir.edu

Third author Affiliation3

## **ABSTRACT**

The abstract should be placed at the top left column and should contain about 150-200 words.

# 1. INTRODUCTION

- 2. DEEP CONVOLUTIONAL NETWORKS
- 3. DEEP SUPERVISION OF MELODIC CONTOUR
  - 4. SINGLE-INSTRUMENT CLASSIFICATION

#### 4.1 Dataset

In order to evaluate the proposed algorithms, we used MedleyDB [1], a dataset of 122 multitracks annotated with instrument activations as well as melodic  $f_0$  curves when present.

## 5. POLYPHONIC CLASSIFICATION

# 6. CONCLUSIONS

## 7. REFERENCES

[1] Rachel Bittner, Justin Salamon, Mike Tierney, Matthias Mauch, Chris Cannam, and Juan Bello. Medleydb: a multitrack dataset for annotation-intensive mir research. International Society for Music Information Retrieval Conference, 2014.