



Norges miljø- og
biovitenskapelige
universitet

DAT390 term paper

Detection and Classification of Acoustic Events using Machine Learning

Jon Nordby, December 2018

Abstract

A review of available literature on Acoustic Event Detection and Acoustic Event Classification was performed, and the theory of the important concepts for practical applications was summarized.

A baseline method was implemented using RandomForest on max-summarized mel-spectrograms, and tested on Bird Audio Classification using the DCASE2018 Task 3 dataset. At 77% AUC ROC on the testset in the matched case, it falls short of state-of-the-art, likely due to the limited feature extraction method that was chosen.