Sound Detection and Classification
using Spiking Neural Networks

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Outline

Introduction

- Presentation of the Project
- Sound Detection and Classification
- Spiking Neural Networks

Outline

Data

- Type of Data
- Goal to achieve with this data

Technical Approach

- State of the art
- Technical Approach

Theoritical part

- Spiking Neural Networks
- Sound Detection and Classification

Outline

Pre-processing

- Collecting the data
- Adaptation of the data
- Checking that there are no errors / repetitions

Outline

Spectrograms

- Spectrograms

MEL

- MEL

MFCC

- MFCC

Outline

Spiking Neural Networks - First results

- First results

Outline

Conclusion

- Summary
- Future Work