Kohki Mametani
Curriculum Vitae

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 kokimame

Education

2019 – 2020
Sep   Exp. Aug
Master in Sound and Music Computing, *Pompeu Fabra University*, Barcelona, Spain.
- Studying similarity learning with triplet loss to produce expressive deep audio embeddings

2015 – 2019
Apr   Mar
Bachelor of Engineering, *Doshisha University*, Kyoto, Japan.

Experience

2019 – 2019
Apr   Sep
Full-time Machine Learning Intern, *Qosmo*, Tokyo, Japan.
- Implemented CNN model for tempo detection in Tensorflow which runs on DJ equipments
- Implemented object detection feature using YOLO9000 to a video search tool
- Built a browser automation tool with Selenium to collect audio data from the web to train machine learning models

2018 – 2018
Apr   Jun
Research Assistant, *Doshisha University*, Kyoto, Japan.
- Developed a phoneme segmentation tool with HTK and its Python wrapper and increased the productivity of manual segmentation by twice

Publications

2019
May
Investigating context features hidden in End-to-End TTS.
- Proposed an analytical framework to make the result of End-to-End TTS explainable
- Accepted for the IEEE International Conference on Siginal and Speech Processing 2019 (ICASSP)

Selected Projects

2018 – present
Jan
Joytan App, *Founder*.
- Lead an international team of 50+ members to produce multilingual teaching video for our YouTube channel with 50,000+ subscribers
- Built NLP and TTS tools to produce language-teaching materials based on bilingual corpora
- Developed an application to analyze the performance of our videos using Selenium and YouTube API

2019 – 2019
Aug   Dec
Joytan-REC, *Maintainer*.
- Designed and developed an Android app in Kotlin to crowdsource multilingual speech recordings for language-teaching materials
- Added speech denoising function for Firebase running on cloud servers

2019 – 2019
Aug   Feb
Joytan Public, *Maintainer*.
- Designed and developed a website to review audio files with authentication system and discussion forum using jQuery, Bootstrap, and Firebase.

2018 – 2019
Dec   Jan
NTT Corevo Challenge, *Competitor*.
- Developed deep learning model using Keras for audio classification (Gender x Age)

2017 – 2018
Sep   Mar
Joytan, *Maintainer*.
- Automated audio/textbook creation using speech synthesis and web-scraping
- Released a cross-platform desktop (Linux, Windows, and OSX) application using PyQt5

2017 – 2017
May   Jun
Pycraft, *Contributor*.
- Fixed data structure flaws and made it easier to extend the game functionality

2017 – 2017
Apr   May
CGINC, *Maintainer*.
- Developed a Povray-like raytracing software in C
- Implemented specular light computation and a CSG-model definition parser from scratch