Pedro Ramoneda Franco

Technologist, Pianist and PhD candidate.

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Q 24 years - Spain

G Google Scholar

O Github

My PhD thesis focuses on audio and symbolic music dataset creation and deep learning for performance difficulty analysis under the supervision of Dr. Marius Miron and Prof. Xavier Serra. We aim to understand the performance difficulty, through pedagogically motivated representations, to recommend a customised and optimised learning path for each music student. My ML research interests include explainable machine learning, generative models, human-centered AI and curriculum learning.

Experience

Early Stage Researcher

Music Technology Group - Universitat Pompeu Fabra

2021 - Currently

♀ Barcelona

Research Internship - mirdata's dev & Repovizz data curator

Music Technology Group - Universitat Pompeu Fabra

2020 – 2021

Barcelona

Business Information Systems - Admin & Dev

Nina Fruits s.l.

2015 - 2020

♥ Zaragoza, Spain

Piano teacher

High school: "El Salvador"

2014 – 2016

♥ Zaragoza, Spain

% Papers

Ramoneda, P., Tamer, N. C., Eremenko, V., Miron, M. & Serra, X. *Score difficulty analysis for piano performance education*. Submitted to ICASSP 2022 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) (2022).

Ramoneda, P., Plaja, G., Miron, M., Caro, R. & Serra, X. *Understanding the relationship between voice and accompaniment on symbolic music data*. Manuscript will be submitted to SMC 2022.

Ramoneda, P., Miron, M. & Serra, X. *Piano fingering with reinforcement learning*. Arxiv.

Bernardes, G., Ramoneda, P. & Miron, M. *Unveiling high-level discriminant harmonic descriptors of musical style in the tonal interval space.* In ICMPC-ESCOM, 2021.

Ramoneda, P. & Bernardes, G. *Revisiting harmonic change detection*. In 149th AES convention, the Audio Engineering Society, AES149 (2020).

Academic Dissertations

Master's thesis, Universitat Pompeu Fabra, Barcelona.

Title: Computational methods to study piano music in education context. Under the supevision of Dr. Marius Miron and Prof. Xavier Serra.

Bachelor's thesis, University of Porto and University of Zaragoza. Title: *Harmonic change detection from musical audio*. Under the supevision of Prof. Gilberto Bernardes.

Education

PhD in Information technology

Universitat Pompeu Fabra

Master in Sound and Music Technology

Universitat Pompeu Fabra

2020 - 2021

BSc Computer Science Engineering

Universidad de Zaragoza

2015–2020

BMus Piano Performance, (Paused)

CSMA

2016–2018

Professional Degree Piano Performance

CPMZ

2009–2015

Languages

Spanish English Portuguese



Skills

Python C/C++ JS

Machine Learning Deep Learning DSP

Embedded Systems Recording Techniques

Music analysis Music Performance

Music Information Retrieval

A usual work-journey

