EMMANOUIL KARYSTINAIOS

Vienna ⋄ Austria

(+30) 6973775571 ⋄ emmanouil.karystinaios@jku.at

RESEARCH INTERESTS

Music Information Research
Music Structure Analysis
Multi-task analysis on large-scale music collections
Machine Learning on Music

EDUCATION

Ph.D. : Artificial Intelligence and Music *March 2021 - Present*
Johannes Kepler University
Institute of Computational Perception

Master : Mathematical Logic and Fundamentals of Programming *Sep 2018 - Sep 2020*
Université Paris7 Diderot GPA Global : 13.7 /20
UFR Mathematics

Master : Musical Signal Processing and Composition *Oct 2017 - Sep 2019*
Université Paris8 GPA Global : 15.1 /20
Department of Arts

Musicology and Composition (Bac+5) *Sep 2012 - Sep 2017*
Aristote University of Thessaloniki GPA Global : 17.4/20
Departement of Fine Arts

Musical Programming - MaxMSP *Nov 2016 - Mar 2017*
IRCAM Certificate Mention : Very Good
Centre Pompidou, Paris

TECHNICAL SKILLS

Programming Languages	Python, O'Caml, Faust, Javascript
Software & Tools	MaxMSP, LaTeX, Reaper, Soundsculpt, Arduino

LANGUAGES

French :	Excellent command C2 Dalf (2016)
English :	Excellent command TOEFL $>$ 90. (2019)
Greek :	Native speaker.

PUBLICATIONS

Music genre descriptor for classification based on Tonnetz Trajectories (article)
Emmanouil Karystinaios, Corentin Guichaoua, Moreno Andreatta, Louis Bigo, Isabelle Bloch.
Journées d'Informatique Musicale (JIM) 2020, (*status : accepted*).

POSITIONS OF RESPONSIBILITY

Paris Télecom October 2019 - Mai 2020
Structural music modeling and genre classification *internship*

· Musical style classification using machine learning on graphs.
· Structural segmentation on music using self-similarity matrices.
· Pattern discovery and structural representation.

University of Strasbourg April 2019 - August 2019
Style Genre Classification on Symbolic Music Data *Master 2 internship*

· Build Topological tool and applied graph analysis for automated Musical analysis
· Programmed in python, using networkX, pandas, scikit, etc.
· Machine Learning for Composer or Style Prediction (up to 8 classes)

Museum of Modern Art of Thessaloniki March 2016 - June 2016
Website creator *Bachelor internship*

· Construction of a website, programming in HTML and CSS.
· Management of artists' groups and events.
· noisemuse.mus.auth.gr

RESEARCH PROJECTS

DSP Library for Coq December 2018 - February 2019
University Project

· Developped primitive DSP functions in Coq functional programming language.
· Signal definition from a Axiomatic point of view.

A guide to Spectral Analysis :
from the Phase Vocoder to Morphing Octobre 2017 - Septembre 2018
M2 Dissertation

· A project made in MaxMSP, a fully functional Phase Vocoder with visual and audio morphing.
· Usage of spectral processing models such as STFT, Gabor filters, etc.
· Research on mathematical formulas of spectral processing.

A Dissertation into the Spectral Music Idiom and Spectral Analysis with MaxMSP and Jitter March 2016 - September 2017

Student Research

- Programming part with MaxMSP, spectral analysis and spectral decomposition of complex spectra
- Composition of an orchestral piece with data from the analysis.

ADDITIONAL SKILLS AND INTERESTS

Composition of electronic music : soundcloud.com/manos-karistineos
Frequent user of visual design plateforms such as : Blender et Unity.
Experimented with microcontrolers such as : Arduino, Midicontrollers, MidiKeyboards etc.