Emmanouil KARYSTINAIOS

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● Vienna, Austria

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SKILLS

- **Programming Languages** : Python, Pytorch, C, OCaml
- **Maintenance** : Skilled in DevOps practices ensuring continuous integration, testing, and deployment across projects
- **Software & Tools** : MaxMSP, Reaper, Inkscape, SuperCollider, MuseScore
- **Music Instruments** : Guitar, Trumpet & Piano
- **Music Production** : Skilled in composition and audio mixing, with experience producing original music pieces.
- **Teaching and Mentorship** : Experienced lecturer; supervised many students and interns.
- **Research Methodology** : Published 15+ papers.
- **Team Managment** : Collaborated in interdisciplinary teams to develop deep-learning models and software for music
- **Project Management** : Led complex projects, from conception to publication
- **Transdisciplinarity** : Higher knowledge and degrees from three domains, music, mathematics, and computer science.
- **Efficiency and Attention to Detail** : Dedicated to efficiency and precision, with a meticulous approach to research, publication, and code quality.
- **Adaptability** : Worked and lived in 3 countries speaking fluently 4 languages

LANGUAGE SKILLS

- French
- English
- Greek
- German

MIR Research

PROFILE

Emmanouil Karystinaios obtained his Ph.D. in artificial intelligence at the Computational Perception Institute of Johannes Kepler University. His research focuses on Graph Neural Networks, Computational Musicology and Music Information Retrieval. Currently, he is working on Automatic Analysis of Symbolic Music using Graph Neural Networks (GNNs) and Generative Music Models for Music Therapy.

PROFESSIONAL EXPERIENCE

JOHANNES KEPLER UNIVERSITY   2020 – PRESENT
Conducted Research on Music Information Retrieval and produced over 15 publications in high ranking conferences over the past 3 years.

UNIVERSITY OF MUSIC AND PERFORMING ARTS VIENNA   2022 – 2023
Teaching position as Lecturer on the topic of Music and Sound Computing.

UNIVERSITY OF FINE ARTS LINZ   2021 – 2023
Teaching position as Lecturer on the topic of Music and Sound Computing.

TELECOM PARIS   2019 – 2020
(Internship) Musical style classification with deep learning.

STRASBOURG INSTITUTE FOR ADVANCED MATHEMATICS   2019
(Internship) Topological tools for music analysis graphs.

PROJECTS

GRAPHMUSE   2023 – 2024
Created and published an open-source python library for Graph-Based Deep learning on Symbolic music.
- Standardized methodologies for data handling
- Formalized input and output ontologies for graph-based representations of music
- Introduced high-capable State-of-the-art music intuitive models

PARTITURA   2020 – PRESENT
Active developer of the Python package Partitura for symbolic music processing. Main contributions:
- DevOps and continuous development with test suites
- Wrote several parsers for symbolic music formats
- Developed ontologies for musical elements such as harmony, phrases, intervals, etc.

GENERATIVE MUSIC MEDICINE   2024 – PRESENT
Fine-tuned large music/audio generative models (diffusion and autoregressive). Developed, trained and deployed emotion-based conditioning for such models for the purpose of applying them in a music therapy setting.

EDUCATION

JOHANNES KEPLER UNIVERSITY LINZ   2021 – 2024
Doctorate Degree on AI from the Department of Technical Sciences.

DIDEROT UNIVERSITY PARIS 7   2018 – 2020
Master on Mathematical Logic and Programming Fundamentals from the Department of Mathematics

DESCARTES UNIVERSITY PARIS 8   2017 – 2019
Master of Composition and Musical Programming from the Department of Fine Arts

ARISTOTLE UNIVERSITY OF THESSALONIKI   2012 – 2017
Diploma of Musicology from the Department of Fine Arts with integrated Master on Composition and Analysis