PRINCIPLES, CHALLENGES AND APPLICATIONS OF
ARTIFICIAL INTELLIGENCE IN MUSIC EDUCATION

Friday, May 16, 2025
9:00 - 11:00 CEST
online, Zoom

Link to Registration

Description:

At the end of 2022, generative artificial intelligence (Gen-AI) burst onto the public scene with the release of the ChatGPT tool by Open AI. Like the rest of the working world, music professionals became aware of the power and development potential of AI, but also of its limits and risks, raising a large number of sometimes contradictory questions. What are the fundamental principles that drive the black boxes of today's generative artificial intelligence tools? What AI tools are currently available in the field of music? What are their accessibility, ease of use, areas of application and possible uses in the various fields of musical practice and creation? In particular, how can they be integrated into music teaching practices, and how can they be used to develop teaching methods? This is the set of questions that this two-part lecture sets out to answer, alternating theoretical presentations with demonstrations.

Speakers:
Richard -Emmanuel Eastes , PhD

After an academic career in several chemistry laboratories (supramolecular chemistry, atmospheric chemistry, organometallic chemistry and electrochemistry), Richard-Emmanuel Eastes turned to educational sciences, cognitive sciences and philosophy. A career path that has led him to collaborate with 5 Nobel Prize winners.

During his career as a teacher and researcher at the Ecole normale supérieure (Paris), he founded and chaired several associations dedicated to science-society relations and innovation in science communication, before directing an arts and sciences museum (Paris).

Responsible for academic and professional development at the University of Applied Sciences and Arts of Western Switzerland (HES-SO), he sits on its 'AI in education and training' TaskForce. He is also an associate researcher at the STS Lab at the University of Lausanne, where he explores the relationships between nature, science, technology and society.

In 2015, he founded the company SEGALLIS (cognitive engineering, science communication & business integration of research). In this context, he advises multinationals and start-ups in the fields of science-society relations on the one hand, and in the applications and challenges of digital technology and artificial intelligence on the other.

He has published several books, including Les scientifiques jouent-ils aux dés ? - Vers une agriculture choisie - Comment je suis devenu chimiste - La science en culture : le détour par l'art - Philosophie de la chimie.

Wikipedia page: https://fr.wikipedia.org/wiki/Richard-Emmanuel_Eastes

Gilbert Nouno, PhD

Composer, digital artist, and interdisciplinary researcher, Gilbert Nouno explores the intersections of sound, image, and technology. Influenced by both classical traditions and emerging media, he develops new forms of expression at the crossroads of man and machine, spanning music, theatre, and dance. His current research focuses on cutting- edge AI techniques applied to musical improvisation, interactive performance, and interdisciplinary art. He has collaborated with figures such as Pierre Boulez, Jonathan Harvey, Olga Neuwirth, saxophonist Steve Coleman, scenographer Jean Kalman, and director Pierre Audi.

He heads the Electroacoustic Music Centre within the Geneva Haute école de musique (HEM), where he teaches composition, and also lectures at the Bern University of the Arts (HKB) and the Barenboim-Said Akademie in Berlin. A laureate of the Villa Medici in Rome and the Villa Kujoyama in Kyoto, he is internationally recognized for his innovative approaches to contemporary and interactive creation. His string quartet with electronics, Deejay , and his cross-media pocket opera Iwona marked a shift toward interactive and hybrid forms, setting the stage for performative and interdisciplinary works such as Feedback , a new media piece for triangle, video, and electronics, and SINE , a recent AI-driven audiovisual composition for virtual percussion.

Personal website: https://gilbertnouno.net