Preface

The Musical Metacreation workshop aims to bring together artists, practitioners and researchers interested in developing software and systems that autonomously (or interactively) recognize, learn, represent, complete, accompany, compose or interpret music.

The ability to develop and use tools is a defining characteristic of human beings. From the invention of the wheel to the development of personal digital assistants, technology has continually shaped us. In recent years, the computerization of society has opened the door to the automation of information processes. Artificial intelligence, a subfield of computer sciences, has been tremendously successful at endowing machines with autonomous and proactive behaviors to achieve tasks that rely on intelligence when done by humans. As a result, machines are everywhere: omnipresent and unavoidable. They fly planes, they regulate nuclear plants, they design electronic circuits, they build cars, and they play chess and Jeopardy. The list is seemingly endless, but can machines be creative?

Computational creativity is a new and fast growing field that is exploring the automation of creative processes. It investigates creativity as it is (striving to understand and simulate human creativity) as well as creativity as it could be (processes that we know humans to be incapable of, at least without machines). It brings together academics and artists who design machines for the automation of creative tasks, also known as Metacreation.

As the contemporary approach to generative art, Metacreation involves using tools and techniques from artificial intelligence, artificial life, and machine learning (themselves inspired by cognitive and life sciences) to develop software systems that are creative on their own. In other words, a software is a metacreation if it exhibits behaviors that would be considered creative if performed by humans. While metacreation, or computational creativity, can be studied in general this workshop focuses on works that address musical expression in the sonic domain. Musical Metacreation suggests exciting new opportunities for creative music making: discovery and exploration of novel musical styles and content, collaboration between human performers and creative software agents, and design of systems in gaming and entertainment that dynamically generate or modify music.

The study and production of generative computer music systems has seen a strong and sustained growth. Through the years, a wide variety of work has been presented across a range of venues, including the International Computer Music Conference, the conference of the Audio Engineering Society, the International Conference on Computational Creativity, Sound and Music Computing, the international conference on Evolutionary and Biologically Inspired Music, Sound, Art and Design, the Generative Art conference, the symposium of the International Society for Music Information Retrieval, the international conference on New Interfaces for Musical Expression, and various other artificial intelligence, entertainment computing, or computer-music conferences. While these forums with broader topics are necessary, this workshop does gather experts and specialists of generative music systems in a more focused arena, to define, explore and push forward the boundaries of musical metacreation. This technical report presents the 10 contributions accepted through peer reviewing to the third international workshop on Musical Metacreation.

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