Tiago Martins Nereida Rodríguez-Fernández Sérgio M. Rebelo (Eds.)

# Artificial Intelligence in Music, Sound, Art and Design

11th International Conference, EvoMUSART 2022 Held as Part of EvoStar 2022 Madrid, Spain, April 20–22, 2022, Proceedings







# Lecture Notes in Computer Science 13221

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# Preface

EvoMUSART 2022—the 11th International Conference on Artificial Intelligence in Music, Sound, Art and Design—took place from 20 to 22 April 2022, in Madrid, Spain, as part of Evo\*, the leading European event on bio-inspired computing.

Following the success of previous events and the importance of the field of artificial intelligence, specifically, evolutionary and biologically inspired (artificial neural network, swarm, alife) music, sound, art, and design, EvoMUSART has become an Evo\* conference with independent proceedings since 2012.

Although the use of artificial intelligence for artistic purposes can be traced back to the 1970s, the use of artificial intelligence for the development of artistic systems is a recent, exciting, and significant area of research. There is a growing interest in the application of these techniques in fields such as visual art and music generation, analysis, and interpretation; sound synthesis; architecture; video; poetry; design; and other creative tasks.

The main goal of EvoMUSART 2022 was to bring together researchers who are using artificial intelligence techniques for artistic tasks, providing the opportunity to promote, present, and discuss ongoing work in the area. As always, the atmosphere was fun, friendly, and constructive.

EvoMUSART has grown steadily since its first edition in 2003 in Essex, UK, when it was one of the Applications of Evolutionary Computing workshops. Since 2012, it has been a full conference as part of the Evo\* co-located events.

EvoMUSART 2022 received 51 submissions. The peer-review process was rigorous and double-blind. The international Program Committee, listed below, was composed of 56 members from 20 countries. EvoMUSART continued to provide useful feedback to authors: among the papers sent for full review, there were on average three reviews per paper. In total, 24 papers were accepted, comprising 18 long talks (35% acceptance rate) and six posters accompanied by short talks, giving an overall acceptance rate of 47%.

As always, the EvoMUSART proceedings cover a wide range of topics and application areas, including generative approaches to music, visual art, and design. This volume of proceedings collects the accepted papers.

As in previous years, the standard of submissions was high and good quality papers had to be rejected. We thank all authors for submitting their work, including those whose work was not accepted for presentation on this occasion.

The work of reviewing is done voluntarily and generally with little official recognition from the institutions where reviewers are employed. Nevertheless, professional reviewing is essential to a healthy conference. Therefore we particularly thank the members of the Program Committee for their hard work and professionalism in providing constructive and fair reviews.

EvoMUSART 2022 was part of the Evo\* 2022 event, which included three additional conferences: EuroGP 2022, EvoCOP 2022, and EvoApplications 2022. Many people helped to make this event a success.

We thank SPECIES, the Society for the Promotion of Evolutionary Computation in Europe and its Surroundings, for handling the coordination and financial administration.

We thank the local organizing team led by Iñaki Hidalgo (Complutense University of Madrid, Spain) and also Complutense University of Madrid, Spain, for their patronage of the event. We would also like to thank Federico Divina (University Pablo de Olavide, Spain) for initially supporting the local organization.

We thank João Correia (University of Coimbra, Portugal) for Evo\* publicity, José Francisco Chicano García (University of Málaga, Spain) for the Evo\* website, Nuno Lourenço (University of Coimbra, Portugal) for the submission system coordination, and all involved in the organization of Evo\* 2022.

We thank the Evo\* invited keynote speakers, Gabriela Ochoa (University of Stirling, UK) and Pedro Larrañaga (Technical University of Madrid, Spain), for their inspiring and enlightening keynote talks.

We thank the steering committee of EvoMUSART for the advice, support, and supervision. In particular, we thank Juan Romero (University of A Coruña, Spain), Penousal Machado (University of Coimbra, Portugal), and Colin Johnson (University of Nottingham, UK).

Finally, we would like to express our most heartfelt thanks to Anna Esparcia-Alcázar (SPECIES, Europe), for her dedicated work and coordination of the event. Without her work, and the work of Jennifer Willies in past years, Evo\* would not enjoy its current level of success as the leading European event on bio-inspired computation.

April 2022

Tiago Martins Nereida Rodríguez-Fernández Sérgio M. Rebelo

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