CALL FOR SPECIAL TRACK PAPERS AND EXHIBITIONS
Human-AI interaction in creative arts and sciences

The INNS Joint Conference on Neural Networks welcomes submissions of papers, artistic demos and exhibitions to the Special Track on *Human-AI Interaction in Creative Arts and Sciences*. This track aims to explore the rapidly evolving domain where artificial intelligence intersects with human creativity, imagination, and scientific inquiry. As AI technologies become increasingly embedded in the creative process, they introduce new possibilities and challenges for how humans and AI collaborate, co-create, and inspire innovation in artistic, scientific, and interdisciplinary practices.

PAPER SUBMISSIONS

We encourage the submission of research papers on both the theoretical and practical aspects of human-AI interaction, spanning collaborative AI, generative models, interpretability, user-centered design, ethical considerations, and applications in diverse creative and scientific disciplines. Submissions may cover (but are not limited to) the following topics:

- **Human-AI Collaboration in Arts and Sciences**: Innovations in AI systems that act as collaborative partners with artists, musicians, scientists, and other creative professionals. Methods that enhance mutual inspiration and co-creation between humans and AI in real-time.
- **Generative AI for Creativity**: Advances in generative AI that foster new forms of artistic expression, including image synthesis, music composition, text generation, and other creative outputs. Studies examining the role of AI in expanding creative boundaries.
- **Explainable and Interpretable AI for Creative Processes**: Techniques that make AI's role in creative processes transparent to users, promoting better understanding and trust. Approaches that support explainability and enhance the interpretability of AI-driven creative systems.
- **Affective Computing and Emotional Intelligence**: Development of AI systems that can understand, respond to, and even generate emotional content, enhancing human experiences in arts and entertainment. Emotional human-AI interaction paradigms in creative contexts.
- **Human-Centered AI Design in Creative Tools**: Research on user-centered design principles tailored to creative applications, ensuring intuitive, accessible, and inspiring AI-driven tools. Design methodologies that facilitate seamless integration of AI into creative workflows.
- **Ethics, Bias, and Cultural Impacts**: Studies examining ethical issues in human-AI creative interactions, including bias, cultural implications, ownership, and intellectual property in AI-generated art. Frameworks addressing equitable and responsible AI in creative industries.

- **AI in Scientific Discovery and Innovation**: Applications of AI that enhance scientific creativity and discovery processes, including problem-solving approaches, hypothesis generation, and exploration in fields such as biology, physics, and environmental science.
- **Interactive AI for Educational Purposes in the Arts and Sciences**: Research on AI-driven educational tools that enhance learning in creative arts and scientific domains. Innovations that support AI-assisted education and inspire new ways of thinking.
- **Human-AI Interaction in Emerging Media**: Applications of AI in virtual and augmented reality, interactive media, and other emerging platforms where human creativity and AI can converge to create immersive experiences.

Research papers must be submitted with the same format and general Paper Submission Guidelines as for the main conference track via the IJCNN 2025 CMT System, selecting as primary subject area the Special Track - "Human-AI interaction in creative arts and sciences". All the accepted and presented papers will be published on IEEE Xplore Digital Library and indexed by Scopus.

ARTISTIC DEMOS AND EXHIBITIONS

In addition to papers, we welcome **artistic demos and exhibitions** that show the interaction between humans and AI is central to the experience. These can include installations, live performances, interactive exhibits, and other creative presentations that demonstrate human-AI collaboration and creativity. We encourage submissions from artists, designers, performers, and other creative practitioners who wish to exhibit their work at the conference.

Demos and exhibitions should illustrate clear evidence of human-AI interaction, highlighting how AI enables, influences, or transforms artistic expression. Submissions should describe the concept, implementation, and interaction model, as well as the intended audience experience.

Proposals can be submitted as a single file (including title, contributors, abstract, technical setup requirements, and any necessary materials for the presentation) via the following Google Form. Accepted demos and exhibits will be allocated dedicated space at the conference venue.

We look forward to your contributions to this exciting area of research at the intersection of human creativity and artificial intelligence!

IMPORTANT DATES
- Special Track Paper Submission Deadline – January 15, 2025
- Artistic Demo and Exhibition Proposal Submission Deadline – March 20, 2025
- Special Track Paper Acceptance Notification – March 31, 2025
- Artistic Demo and Exhibition Proposal Acceptance Notification – April 20, 2025

SPECIAL TRACK CHAIR
- **Felipe Tobar** – Imperial College London, UK