HAII5.0: Embracing Human-Aware AI in Industry 5.0
Workshop at the 27th European Conference on Artificial Intelligence (ECAI 2024)
19 October 2024, Santiago de Compostela

The Workshop

The workshop on "Embracing Human-aware AI in Industry 5.0" is designed to delve into the evolving landscape of artificial intelligence in the industrial sector, placing emphasis on how AI should reflect and respond to human activities and demands. As industries worldwide transition into the realms of Industry 5.0, integrating AI technologies becomes not just an asset but a necessity. This shift heralds unprecedented opportunities and challenges, where the interplay between human workers and advanced AI systems takes central stage. Our workshop explored this critical intersection, focusing on how AI should be designed, implemented, validated and managed in a human-aware way.

Human-aware AI requires novel solutions that allow humans and machines to collaborate seamlessly within the complexities of the real world, driving sustainability, resiliency, and benefits to people and society. In business branches like commerce, the need for human-aware AI is already taken for granted. Industry, including product design, manufacturing, aftermarket, maintenance, and all forms of industrial engineering, seems to be lagging behind since the focus for many years has been pure automation. By delving into these topics with a human-aware lens, this workshop will significantly contribute to the ECAI conference, offering scientific discussions that align well with its themes and goals.

For the HAII 5.0 workshop, our objective was to provide a comprehensive platform for participants to gain insights into the current trends, potential benefits, and challenges associated with the deployment of AI in the industry in collaboration with and supporting (not replacing) humans — even on a cognitive level. The workshop is expected to spark innovative ideas, encourage collaborations, and contribute significantly to advancing human-aware AI in the industrial sector. In the call for papers, particular emphasis was placed on practical applications, challenges, and the latest research findings in the field. Through this workshop, we aspire to shape the future of the industry where AI not only enhances efficiency and productivity but also aligns seamlessly with human needs and values.

Our workshop papers present original work in the area. We feature a series of presentations from the contributing participants, two keynote talks, open

discussions, and interactive panel sessions led by experts in the field of AI for Industry 5.0. Submissions cover a wide array of topics, ranging from ethical considerations and human-AI collaboration to AI-driven process optimisation, decision support systems, integration of domain and expert knowledge in AI algorithms, and the future of work on the industrial floor. The workshop format at ECAI 2024 fosters a multidisciplinary dialogue on how AI can be human-aware and effectively integrated into various industrial processes by bringing together academicians, industry professionals, and AI practitioners.

We would like to thank the reviewers for their intensive work, the authors for their contributions and ECAI 2024 for giving us the opportunity and this ideal scientific environment for organising HAII 5.0

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