

The document is a preface to the proceedings of two international workshops: the 1st International Workshop on Computational Intelligence for Process Mining (CI4PM 2022) and the 1st International Workshop on Pervasive Artificial Intelligence (PAI 2022). These workshops were co-located with the 40th IEEE International Joint Conference on Neural Networks (IJCNN 2022) as part of the 12th IEEE World Congress on Computational Intelligence (WCCI 2022), hosted by the University of Padua in July 2022. The CI4PM workshop focused on merging computational intelligence with process mining, emphasizing the application of intelligent heuristic and evolutionary computing to analyze event data. It aimed to address open problems in process mining, such as predictive process monitoring and the design of process-aware recommendation systems. Three papers were presented, highlighting topics like enhancing incident completion time prediction and reconstructing anomalous traces in business process event logs.

The PAI workshop emphasized the pervasive nature of artificial intelligence (AI) in ICT systems and daily products and services. It explored the challenges and research opportunities in creating neural network methodologies and architectures that are energy-efficient, adaptable, dependable, secure, and interactive with humans. The workshop discussed the need for computing and communication technologies to support the deployment and execution of neural models, including neuromorphic hardware and high-performance computing for AI acceleration. Two invited talks and several papers presented innovations in AI methodologies, models, applications in pervasive scenarios, and computing infrastructures for AI, highlighting the theme of sustainable AI and academia-industry collaborations.