Artificial Intelligence for Healthcare Applications



International Workshop

Most of the medical data collected from healthcare systems are recorded in digital format. The increased availability of these data has enabled a number of artificial intelligence applications. Specifically, machine learning can generate insights to improve the discovery of new therapeutic tools, to support diagnostic decisions, to help in the rehabilitation process, to name a few. Researchers coupled with expert clinicians can play an important role in turning complex medical data (e.g., genomic data, online acquisitions of physicians, medical imagery, etc.) into actionable knowledge that ultimately improves patient care. In the last years, these topics have drawn clinical and machine learning research which ultimately led to practical and successful applications in healthcare. The purpose of this workshop is to present recent advances in artificial intelligence techniques for healthcare applications.

The workshop will be held on **10 January** in conjunction with <u>ICPR 2020</u> (25th International Conference on Pattern Recognition, Milan, Italy, 10-15 January 2020).

Topics include, but are not limited to the following:	
 Biomedical image analysis; Data analytics for healthcare; Automatic disease prediction; Automatic diagnosis support systems; Genomic and proteomic data analysis; Artificial intelligence for personalized medicine; Machine Learning as tool to support medical diagnosis and decisions; 	 Machine learning on handwriting and eye- tracking traces for diagnosis and rehabilitation; Decoding of neural signal for diagnosis assistance; Physiological signals processing; Gait analysis; Therapy selection; Brain-computer interface for healthcare; Biomechatronics for medicine;
diagnosis and decisions,	Neuromotor rehabilitation.

Dates:	
Paper submission deadline	October 1st, 2020
Final decision to authors	November 10th, 2020
Camera-ready for proceedings	November 15th, 2020

Proceedings:

The accepted papers will be included in the ICPR 2020 Conference Proceedings, which will be published by Springer. Authors of AIHA 2020 papers can find complete instructions of how to format their papers <u>here</u>. Papers can be submitted using the <u>EasyChair</u>. We are also negotiating the publication of special issue on relevant journals in the computer science field. Authors of selected papers will be invited to submit an extended version of their papers accepted to AIHA.

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