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Machine Learning in Medical Imaging

14th International Workshop, MLMI 2023
Held in Conjunction with MICCAI 2023
Vancouver, BC, Canada, October 8, 2023, Proceedings, Part II

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Editors

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Proceedings, Part II

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Preface

The 14th International Workshop on Machine Learning in Medical Imaging (MLMI 2023) was held in Vancouver, Canada, on October 8, 2023, in conjunction with the 26th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI 2023).

As artificial intelligence (AI) and machine learning (ML) continue to significantly influence both academia and industry, MLMI 2023 aims to facilitate new cutting-edge techniques and their applications in the medical imaging field, including, but not limited to medical image reconstruction, medical image registration, medical image segmentation, computer-aided detection and diagnosis, image fusion, image-guided intervention, image retrieval, etc. MLMI 2023 focused on major trends and challenges in this area and facilitated translating medical imaging research into clinical practice. Topics of interests included deep learning, generative adversarial learning, ensemble learning, transfer learning, multi-task learning, manifold learning, and reinforcement learning, along with their applications to medical image analysis, computer-aided diagnosis, multi-modality fusion, image reconstruction, image retrieval, cellular image analysis, molecular imaging, digital pathology, etc.

The MLMI workshop has attracted original, high-quality submissions on innovative research work in medical imaging using AI and ML. MLMI 2023 received a large number of submissions (139 in total). All the submissions underwent a rigorous double-blind peer-review process, with each paper being reviewed by at least two members of the Program Committee, composed of 89 experts in the field. Based on the reviewing scores and critiques, 93 papers were accepted for presentation at the workshop and chosen to be included in two Springer LNCS volumes, which resulted in an acceptance rate of 66.9%. It was a tough decision and many high-quality papers had to be rejected due to the page limitation.

We are grateful to all Program Committee members for reviewing the submissions and giving constructive comments. We also thank all the authors for making the workshop very fruitful and successful.

October 2023

Xiaohuan Cao
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