Activity Report: EFOMP Course on AI in Medical Physics

I had the privilege of attending the "AI in Medical Physics" course organized by the European Federation of Organizations for Medical Physics (EFOMP). I would like to express my deep appreciation to the PIANOFORTE organization for providing me with funding to participate in this valuable educational event. The course took place in Prague from October 5 to October 7, 2023.

Course Overview

The primary focus of this course was to delve into the advanced aspects of Medical Physics related to Artificial Intelligence. The program aimed to present practical methodologies, state-of-the-art advancements, and future developments in AI as they pertain to the field of Medical Physics.

Course Content

Day 1 (October 5, 2023)

Topics: AI in CT and CBCT Image Formation, AI for Dose and Protocol Optimization in Radiology (with a focus on MRI and radiotherapy), AI for Workflow Optimization and Automation in Radiology, Advanced QA for AI Medical Devices.

Day 2 (October 6, 2023)

Topics: Risk Management in AI, AI Policies and Laws Overview, Role of MPEs in Regulatory Aspects of AI in Clinical Practice.

Day 3 (October 7, 2023)

Topics: Case Study on AI Applications, including Model Evaluation for Safety and Performance, and Software QA Procedures for Companies.

Conclusion

I actively participated in all sessions and successfully completed the final examination, earning 58 EFOMP MPE-CPD Points. This course was a great opportunity to advance my knowledge and skills in implementing AI in the field of medical physics. I'm grateful to EFOMP and PIANOFORTE for making this experience possible. It was a highly valuable course that enhanced my expertise in the intersection of AI and medical physics.

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