Artificial Intelligence & Data Science in Oncology: from Basic Cancer Research to Clinical Research and Commercialization



Abstract We will review several past and current projects, all related to oncology, where AI / data science and machine learning had an active role in advancing the research side or improving the positive impact on patients in the clinical trial setting. Some of these projects were later spun out as separate commercial entities and we will review that briefly. This talk should give you an idea of what it takes to bring an idea from the research / ideation phase, all the way to deployment in clinical trials and beyond. Selected projects that will be discusses will come from the research realm, others from the operations world, and will briefly review a "Made in Italy" recent effort.

Speaker Renato Umeton, Dana-Farber Cancer Institute, Boston, USA

Host Prof. Giorgio Terracina, Dipartimento di Matematica e Informatica, Università della Calabria

Online meeting: June 20th 2022 16.00 (CEST) Meeting link https://tinyurl.com/4jewxvz3

Bio Renato studied computer science for both Master's and Bachelor's, after that he got a Ph.D. in Mathematics and Informatics defending a thesis on Optimization and Ontology for Computational and Systems Biology, which brought him to work first at Microsoft and then at Massachusetts Institute of Technology. His Alma Mater is University of Calabria, and he recently completed his Executive Education at Harvard. Currently Renato serves as Associate Director of Artificial Intelligence Operations and Data Science Services in the Informatics & Analytics department of Dana-Farber Cancer Institute, a teaching affiliate of Harvard Medical School. In this position, where he reports to the Chief Data and Analytics Officer, Renato created the departmental AI & data science group. He accrued 15 years of experience across artificial intelligence, data science, and big data working in other hospitals, in academia, in consulting, and in industry, where he operated in roles spanning from postdoc to director. In those contexts, he worked on several scientific publications and patents, some of which were leveraged in clinical trials and others were licensed to commercial companies.







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