



Call for applications for the assignment of 1 research fellowship grant for carrying out Category B research activities, as per Article 22 of Italian Law No. 240/2010, for the Scientific Disciplinary Sector of ING-INF/05 – Information Processing Systems, at the facilities of the CIR - Integrated Research Centre and of the Departmental Faculty of Engineering of Università Campus Bio-Medico di Roma.

Call Code: ASS-RIC/20_23

Departmental Faculty	Engineering
Research theme in English	Explainable multimodal deep learning.
Brief description of the research in English	<p>Interpreting medical data is multimodal by its very nature, as it makes use of images, electronic health records, and tabular data. Therefore, AI needs to be able to interpret different modalities together to progress toward higher informative clinical decision-making.</p> <p>The Researcher will study how deep neural networks can learn shared representations between different modalities, searching for an optimal fusion architecture that is robust to missing modalities or missing data. The data are CT images, WSI, HERs. Furthermore, a key impediment to the use of DL-based systems in practice is their black-box nature that does not permit them to explain the decisions taken directly. To tackle this limitation, the Researcher will also focus on explainable AI (XAI) for multimodal DNNs.</p> <p>Applications will be directed to precision medicine in lung cancer to predict the outcome.</p>
Scientific Supervisor	Prof. Paolo Soda
Scientific Disciplinary Sector	ING-INF/05 – Information Processing Systems
Language knowledge and skills	English B2
Date of the interview	7th February 2024, at 11:30 am Remote candidates on Microsoft Teams platform