



Call Code: ASS-RIC/05\_24\_PNRR

<b>Departmental Faculty</b>	Engineering
<b>Research theme</b>	AI-Assisted management of Cardiac and Eye Rare Diseases: federated learning architecture for advanced biomedical signal and image processing.
<b>Brief description of the research</b>	<p>This project aims at improving health services for the management of rare disease of eye and heart (i.e., early detection, referral, triage and diagnosis) via application of artificial intelligence (AI) systems. The candidate will develop a container-based architecture for federated learning, capable of deploying and serving via webserver (e.g. RESTful API) pre-trained AI models. The ideal candidate for this project has a comprehensive understanding of the development of such a system and how to link various network endpoints securely and reliably. Additionally, proficiency in Italian and English languages and willingness to travel for project-related work are crucial.</p> <p>The research will be carried out mainly at the Campus Bio-Medico University of Rome, in collaboration with the project partners (<a href="https://www.unicampus.it/it/ucbm/early-detection-of-rare-inherited-retinal-dystrophies-and-cardiac-amyloidosis-enhanced-by-artificial-intelligence">https://www.unicampus.it/it/ucbm/early-detection-of-rare-inherited-retinal-dystrophies-and-cardiac-amyloidosis-enhanced-by-artificial-intelligence</a>).</p>
<b>Scientific Supervisor</b>	Prof. Leandro Pecchia
<b>Scientific Disciplinary Sector</b>	ING-INF/06 – Electronic and Informatics Bioengineering
<b>Admission qualifications</b>	5-year University Degree (old university organization) earned with the previous Italian legislation in Telecommunications Engineering, Electrical Engineering, Computer Engineering, Medical Engineering, Computer Science, or a Master's Degree achieved according to Ministerial Decree 3/11/1999, no. 509 and 22/11/2004, no. 270 in Telecommunications Engineering (30/S, LM-27), Automation Engineering (29/S, LM-25), Computer Engineering (35/S, LM-32), Biomedical Engineering (26/S, LM-21), Computer Science (23/S, LM-18), or equivalent qualification.
<b>Language knowledge and skills</b>	Written and spoken English
<b>Date of the interview</b>	<b>29<sup>th</sup> February 2024, at 11:00 a.m.</b> Remote candidates on Microsoft Teams platform