

Open Call for Expression of Interest for a position of:

- Recognized Researcher, RR, (R2- PhD holders or equivalent who are not yet fully independent)

in one or more of the following research areas:

- Applied Mechanics to Robotics and Sensing for Biomechanics
- Exoskeletons as technological aids for power augmentation or assistance
- Telemedicine and telediagnosis through robotics and wearable devices
- Algorithms for automated health and safety risk assessment
- Performance and Motion analysis in sport and work activities

or in an area at the intersection or at the interface of the previous ones.

In an attempt to strengthening its international position, to enhance the areas of expertise already developed in the faculty, or to open new research avenues, the Institute of Mechanical Intelligence (IIM) is opening a new tenured position of Recognized Researcher (R2) in the area of Applied Mechanics to Robotics and sensing for Biomechanics, exoskeletons as technological aids for power augmentation or assistance, telemedicine and telediagnosis through robotics and wearable devices, algorithms for automated health and safety risk assessment, performance and motion analysis in sport and work activities.

The expertise of the current academic staff of the Scuola in this area is mainly focused on multidisciplinary research that includes biomechanics, ergonomic risk assessment, human-robot interaction (HRI), wearable and networked sensor network(s), data clustering and fusion, embedded machine learning and artificial intelligence, algorithms and robotic systems for medical diagnosis support, algorithms ansd systems for performance analysis in sport and work activities.

The position will be covered either by:

- a direct appointment (i.e. *chiamata diretta*) according to the Italian law (Law 230/2005 art. 1 par.
9)

- an open competitive evaluation procedure (i.e. *concorso*) according to the Italian law (Law 240/2010 art. 24)

Before the formal opening of the position, the Scuola Superiore Sant'Anna is launching a Call for Expression of Interest (CEI) from potential candidates.

Profile. We are looking for scientists with a research background in one or more of the previously indicated research domain(s) and who are expected to work within the Departmental research at crossing intersection among Engineering and health by contributing to research on new devices, systems, interfaces and algorithms that leverages on existing state of the art tools for diagnosis,



telemedicine, and assistance. The researcher should have the ability of devising, design, integrate, test and validate complex HW/SW systems that encompass readiness level from 2 to 7.

Applicants are expected to have a solid research profile and must hold a PhD degree in an engineering field. The successful applicant will be required to teach, advise and mentor undergraduate and graduate students, develop an independent, externally funded research program, participate in all aspects of the Institute activities. Strong written and verbal communication skills are required. Preference will be given to candidates with proven capabilities in fund raising, project and group management through recent and relevant experiences on wearable sensor, physical HRI and the software development.

The benefits offered in terms of collaborations, spaces and infrastructures include involvement in several projects already funded by industries and public bodies (e.g. EU, ESA,...), related to several activities of the newly approved Department of Excellence 2023-2027 of the Class of Experimental and Applied Sciences. The role also entitles the access to well equipped lab facilities of the Departiment and the proposing Institute (IMI). The successful applicant will also benefit of a collaborative environment with researchers and professors in a multidisciplinary environment that includes Control and Automation, Applied Mechanics, Optical Fiber Systems, Medicine, Physics and many more.

The adequacy of the candidates will be assessed by the School leadership and by the relevant recruiting structure mainly on the basis of the self-assessment form reported in the **Appendix**.

Terms and Conditions. The starting yearly gross salary for the Recognized Researcher is € 44.207, and can be increased based on seniority and the achievements of qualified research results. The severance pay is equal to one monthly gross salary for each year of employment. The employer pays social security charges.

Application procedure. Fill in the **Appendix** and submit the application by email to <u>scouting@santannapisa.it</u> within **June 18th, 2023**. Please indicate in the subject line this code: **RR-DIPE-MechanicalIntelligence**. In case of inquiries, please contact:

Prof. Massimo Bergamasco massimo.bergamasco@santannapisa.it

The candidate will be notified about the results of the CEI within .30 days from the deadline.The candidates could be invited for an interview at the Scuola Superiore Sant'Anna.

Timing. It is expected to fill the position by the end of 2023.

Equal opportunities: Scuola Sant'Anna is an equal-opportunity/affirmative action employer. Women and underrepresented minorities are especially encouraged to apply.

Disclaimer: this is not yet a job vacancy advertisement. Based on the expressions of interest for these positions, the Sant'Anna School for Advanced Studies will determine whether or not to launch an open competitions (pursuant art. 18 or art. 7 of the Italian Law 240/2010) or to proceed with the direct appointment (pursuant art. 1 par 9 of the Italian Law 230/2005).



Privacy statement

1.1 The EU Regulation 2016/679 on General Data Protection Regulation (hereinafter GDPR) and the Italian Privacy Code (Legislative Decree 196/2003, as modified by Legislative Decree 101/2018) are applicable to the candidates' personal data processing.

1.2 The Data Controller is the Scuola Superiore Sant'Anna, a public university institute, located in Piazza Martiri della Libertà, 33 Pisa, in the person of the Rector pro tempore.

1.3 Your personal data (e.g. name, career, contacts, cv, recommendation letters, etc.) will be collected by the Scuola under the call for interest by email and processed for the completion of the application.

1.4 Personal data are processed under article 6, sub e) GDPR to perform tasks of public interest within the institutional activities of the Scuola, including the purposes of archiving, historical research, and analysis for statistical purposes.

1.5 The collected personal data will be processed and stored for the time strictly necessary to achieve the purposes for which they have been collected; in any case, special provisions on the documentation storage by public institutions will be applied.

1.6 The data subject may exercise the following rights: - to access to personal data, in the cases and in the ways referred to in art. 15 GDPR; - the rectification, erasure or restriction of the processing of personal data, in the cases and ways referred to in Articles 16- 18 of the Regulations; erasure is not permitted for the data included in the documents that must be kept by the Scuola to guarantee transparency in public activities; - the portability of data, in the cases and in the ways referred to in article 20 GDPR; - to object to the processing, under article 21 GDPR; - the right to submit a complaint to the Italian Data Protection Authority.

1.7 The aforementioned rights may be exercised by sending a request by email either to the Data Controller protocollo@sssup.legalmailpa.it or to the Privacy Committee of the Scuola privacy@santannapisa.it.

For any further information, please do not hesitate to contact the Data Protection Officer (DPO), email: <u>dpo@santannapisa.it</u>.