



Sant'Anna
Scuola Universitaria Superiore Pisa

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 (indicate up to 5 research areas)

- Real-time embedded systems
- Real-time distributed systems and middlewares
- Artificial intelligence and machine learning for embedded systems
- Operating systems and scheduling algorithms
- Timing analysis

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 Telecommunications, Computer Engineering, and Photonics (TECIP) Institute is opening a new tenure-track position for Recognized researcher (R2) in the areas of real-time embedded systems, distributed systems and middlewares, artificial intelligence and machine learning for embedded systems, operating systems and scheduling, and timing analysis.

The expertise of the current academic staff of the Scuola in this area is mainly focused on embedded real-time systems, operating systems and hypervisors, system-level cybersecurity, trustworthy artificial intelligence, cloud computing and big data, and artificial intelligence applied to industrial processes.

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. 18)

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 domains and who are expected to contribute to next-generation computing systems, with particular emphasis on embedded software and distributed systems, middleware technologies, methodologies for achieving time predictability, timing analysis, also applied to machine learning algorithms and deep neural networks for embedded systems. Furthermore, skills on computer architectures and heterogeneous computing platforms are required to exploit the hardware mechanisms available on modern architectures to ensure high performance during the acceleration of machine learning algorithms.

Applicants must hold a PhD degree in a computer 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. Candidates are preferably required to have recent experience on real-time embedded and distributed systems for safety-critical industrial applications.

The benefits offered in terms of collaborations, spaces and infrastructures include involvement in several projects already funded by industries and public institutions (e.g., Horizon Europe), 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 for running various activities on autonomous driving, hardware acceleration of deep neural networks, real-time operating systems, and virtualization software stacks.

Terms and Conditions. The starting yearly gross salary for Recognized Researcher is € 44.207, and can be increased based on seniority and 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 scouting@santannapisa.it within **15/02/2024**. Please indicate in the subject line this code: **RR-ComputerEngineering-TECIP**. In case of inquiries, please contact:

- Prof. Giorgio Buttazzo giorgio.buttazzo@santannapisa.it
- Prof. Alessandro Biondi alessandro.biondi@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 between April and September 2024.

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. 24 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: dpo@santannapisa.it