THE DIRECTOR

WITH REFERENCE TO the rules referred to in Article 13 of the present call for application;

WITH REFERENCE TO the resolution of the Department Board of Computer Science and Engineering - DISI of 18th may 2023, of request for activation of a fixed-term Tenured Assistant Professor position;

WITH REFERENCE TO the resolution of the Board of Directors of 24th March 2023, with which the request was approved;

ORDERS

Art. 1 – Purpose
A procedure of comparative evaluation by qualifications and public discussion is called for the recruitment of 2 positions for Tenured Assistant Professor with a fixed-term full-time employment contract, pursuant to art. 24, paragraph 3, of Law no. 240/2010, Sector competition reference 09/H1 - Information Processing Systems, Scientific sector ING-INF/05 - Information Processing Systems. The job is activated for the needs of research and study of the Department of Computer Science and Engineering - DISI of the Alma Mater Studiorum - University of Bologna. The main service locations for the researchers will be Cesena for "Project 1" and Bologna for "Project 2". The contract shall last six years. A gross annual salary of € 36,840,00 will be granted to the Assistant Professor. The annual increase in this amount will be calculated according to the existing procedure for non-contracted personnel.

Art. 2 – Activities to be performed
The contract includes 350 hours of supplementary teaching and assistance to students, for each academic year covered by the contract. The contract shall schedule 60 hours of frontal teaching on annual basis. Concerning the provisions of art. 11 of the Regulation issued by Rectoral Decree no. 151 of 3rd February 2023 and amendments, the assistant professor's activities must be linked to the development of the following projects:
- Project 1. “Pervasive adoption of machine learning and optimization algorithms to novel development methodologies for heterogeneous architectures". Within the proposed research area, the researcher's main objective is to explore the potential of combining optimization algorithms and machine learning approaches to design a new generation of development environments for multi-level heterogeneous systems, ranging from IoT nodes with embedded sensors to large-scale HPC and Cloud systems. Similar to traditional compilers, these tools will have to interpret domain languages and provide their translation into a format interpretable by the supported architectures. As an additional element of innovation, the proposed methodologies will need to preserve high-level semantics, allowing the coexistence of relevant conceptual spaces at different levels of abstraction, focusing on non functional requirements such as security, explainability, reliability, or ethicality. The researcher's scientific productivity goals aim to publish at least one original scientific article in a scientific journal and three scientific articles in proceedings of international conferences.
- **Project 2.** “The scientific activity will cover one or more of the topics of strategic importance for DISI: Data Science, Artificial Intelligence, Internet of Things”.

The scientific activity will fall within one or more of the above topics, which are relevant to the strategic areas of DISI. In particular, the researcher will have to consider advanced systems and technologies, and consequently carry out theoretical study, modelling, design, implementation, integration, use, or experimental verification: the goal is to achieve implementation and possible technological transfer in real contexts. These activities will be carried out in collaboration with one or more consolidated research groups within DISI for the selected research area. Furthermore, the researcher might develop scientific collaborations with national and international academic and industrial research groups, including the preparation and participation in research projects. It will also be possible for the researcher to be involved in the preparation of national or international research funding requests.

The researcher’s scientific productivity objectives will be aimed, over a three-year period, at the publication of at least 6 papers in international venues (journals and conference proceedings), of which at least 2 in international journals.

**Art. 3 – Admission requirements**

The selection is open to applicants, even citizens of countries not belonging to the European Union, who have obtained the PhD or equivalent qualification obtained in Italy or abroad.

Applicants must be in possession of the aforementioned qualification at the date of the deadline for the submission of applications to the present selection.

In case of a Ph.D. obtained abroad, it is necessary to attach the decree of academic recognition of the degree (so-called decree of equivalence, as provided for by Article 74 of Presidential Decree No. 382/1980). This requirement applies to those who already possess it. Alternatively, the recognition decision of the degree for the purpose of participating in competitions for researcher positions in universities and public research institutions must be provided, in accordance with Legislative Decree No. 206/2007 - amended by Legislative Decree No. 15/2016 (for EU degrees) - and Presidential Decree No. 394/99, Article 49 (for non-EU degrees). In the meantime, before the competent authorities issue the recognition decision, it is possible to submit the receipt confirming the submission of the recognition request.

For more information on the procedures for the recognition of foreign degrees, it is recommended to consult the university’s web page regarding "Non-academic recognition to participate in researcher competitions" at the following address: https://www.unibo.it/en/teaching/enrolment-transfers-and-degrees/recognition-of-a-foreign-degree-1.

In any case, the proof of the recognition of the foreign qualification must be produced to the administration prior to beginning service and, anyhow, within 180 days from the publication of the approval decree of the procedure on the official university bulletin, otherwise the exclusion from the ranking list occurs.

Applications from professors, associate professors, or assistant professor with tenure, as well as individuals who have already benefited from 3-year contracts as Tenured Assistant professor, will not be accepted, even if the applicant is not in service.

The selection is not open to any persons who are related by blood up to the fourth degree, to a professor working in the Department or in the Structure that proposed the activation of the contract, or to the Rector, Director General or a member of the Board of Governors of the University.
The selection is not open to any persons who are related by blood up to the fourth degree, to a professor working in the Department or in the Structure that proposed the activation of the contract, or to the Rector, to the General Director or a member of the Board of Governors of the University. State employees may on unpaid leave for the entire duration of the contract, thus occupying a non-tenure position without pay or social security contributions, in cases where such a position is allowed by the structure of origin, likewise without pay or social security contributions.

Art. 4 – Application procedure
The submission of the application for participation in the selection must be made exclusively via electronic procedure by accessing the following link: https://pica.cineca.it/unibo/

Call deadline: 4th August 2023 at 12:00 (noon, Italian Time).

The application must be submitted at the same time with the insertion of all the attached documentation required.

The following documents shall be enclosed to the electronic application form (preferably files: PDF, other supported files: JPG, BMP, PNG):
1. identification document scanned (10MB max);
2. curriculum vitae with indication of the scientific-professional activity and accompanied by a declaration of possession of each qualification specified therein (10MB max);
3. any letters of reference up to a maximum of three. In case of presentation of reference letters, it is necessary to indicate the e-mail address of the referee to whom the letter is requested. When the application is closed, the system will automatically send a request e-mail to the referee with the candidate’s references and the competition procedure. The referee will not have to register, but access the page indicated in the same e-mail by selecting the link indicated. Within the page, you can upload your reference letter, within the deadline of the call;
4. scientific publications (max «12»: other supported files are TIFF and PS, 20MB max each document) which are already printed at the date of the call of application deadline, or scientific publications accepted for printed, together with the publisher acceptance letter. While uploading each document will be asked to indicate the title, the authors’ names, the publisher, the year of publication. Optional information are the month, the ISBN code, the DOI code, the booklet number. Pursuant to Ministerial Decree 243/11, the PhD thesis is considered a publication, and thus if presented by the candidate it shall be included in the maximum number indicated («12»).

While applying, applicants shall declare under their own responsibility:
1. surname and name;
2. place and date of birth;
3. citizenship;
4. residence address;
5. (if Italian citizens) registration to electoral rolls. If any, the reasons why he/she is not registered or cancelled from them;
6. that there have not been any criminal proceeding against them or current criminal proceedings; otherwise, applicants shall specify the proceedings against them (the date of the record and the judicial authority that issued it) and pending penal proceedings. The existence of a previous criminal conviction is not in itself an impediment to hiring, unless it is a conviction for a crime that prevents the establishment of the employment relationship with the public administration as it derives from the interdiction from public office, or the inability to
contract with the public administration, or the termination of the employment relationship (articles 28, 29, 32-ter, 32-quater, 32-quinquies of the Criminal Code, articles 3,4, 5, L. 97 of March 27, 2001). In other cases, the Administration will ascertain the gravity of the criminally relevant facts committed by the person concerned, for the purposes of access to public employment. This check is carried out with the aim of ascertaining the existence of the fiduciary element which constitutes the fundamental prerequisite of the relationship between employer and worker, as well as for the purpose of assessing the existence of the requisites of moral suitability and aptitude to carry out activities as a public employee;

7. to have or not to have benefited of non-voluntary leave periods due to maternity/paternity compulsory abstention or for serious health reasons, indicating the periods in case

8. possession of the qualification required pursuant to Art. 3 of this call for application and the mark obtained, if any;

9. to be fit to the employment the selection refers to;

10. that they are not, nor have been, professors, associate professors or researchers with tenure, even if not in service, nor to have been tenure track fixed-term assistant professors for at least three years;

11. that they are not related by blood up to the fourth degree, to any professor working in the Department or in the Structure that proposed the activation of the contract, or to the Rector, Director General or a member of the Board of Governors of the University of Bologna;

12. elected e-mail address for the purpose of the participation in this contest;

13. Foreign citizens shall also declare to have a proper knowledge of Italian and to enjoy civil and political rights also in their origin countries or the reasons for loss of enjoyment;

14. to have attended, or not to have attended, for at least thirty-six months, even cumulatively, PhD courses or carried out research activities on the basis of the formal assignment of positions, excluding free-of-charge activities, at other universities or research institutes, either in Italy or abroad;

15. to have been, or not to have been, for at least thirty-six months, holder of junior fixed-term assistant professor contracts or holder of one or more research grants under article 22 of the law of 30 December 2010, n. 240.

Any modification shall be timely communicated to the “Ricercatori a tempo determinato” Office.

In the event of technical problems, you can contact Cineca Support. Details can be found at the bottom of web page https://pica.cineca.it/unibo/.

Art. 5 – Applicants’ obligations
The penalty of exclusion from the selection shall apply in the following cases:

• Non-compliance with the terms established for posting the application form;

• Lack of the requirement pursuant to art. 3 of the present call for application (qualification).

All applicants shall be admitted to the selection and the Administration reserves the right to check that they actually are in possession of the requirements necessary to apply for the selection; the Administration may, at any time and even after the exams, order the exclusion from the selection hereto.

Art. 6 – Selection Board
The Selection Board will be appointed upon administration resolution and is composed of three full or associate professors belonging to the competition Scientific sector or, alternatively, to the same
competition macro-sector for which the procedure is announced or of equivalent role in the case of components not coming from national universities, identified by the Department that proposed the activation of the contract.

Two of the members, external to the University, are drawn with the methods provided by the art. 8-bis of the “Regolamento per la disciplina delle chiamate dei Professori di Prima e Seconda fascia”, issued with DR 977/2013 and s.m., in application of articles 18 and 24 of the Law 240/2010. A third component is identified by the Department Council among the professors inside or outside the University.

As envisaged by art. 57 of Legislative Decree 165/2001, in order to guarantee equal opportunities between men and women for the access to work and work treatment, generally, at least one member is female.

The Selection Board appoints a president and a recording secretary between their members. Notice of the appointment of the will be published on Alma Mater Studiorum - University of Bologna website.

Art. 7 – Selection procedure

The selection procedure is carried out by the Selection Board after a preliminary evaluation of each candidate's qualifications, curriculum and scientific production, including the doctoral thesis, according to the criterion identified by the MUIR in D.M. 243/2011. The candidates chosen in the preliminary evaluation based on their comparative merits - between 10 and 20% of the number of applicants and not less than 6 - will then be called for interview. The interview will consist of a discussion of the candidate’s qualifications and scientific production and may take the form of a seminar open to the public. If the total number of candidates is 6 or less all candidates will be interviewed. Any reference letters produced by the candidates will also be considered. The discussion will take place in Italian. During the discussion, candidates must demonstrate adequate knowledge of the English language. The discussion with the Selection Board will be carried out in public form and will be held in presence or electronically using the audio and video teleconferencing tool via the Teams platform (the workstation from which candidates will take the interview must be equipped with a webcam - essential for the recognition of the candidate - microphone and headphones and/or audio speakers). Notice of the day, time and methods of conducting the public discussion (whether in presence or electronically via Teams) as well as the list of admitted candidates will be published at least 20 days before the discussion on the University website at: https://bandi.unibo.it/docenti/rtd.

The publication on the University website will constitute official notification to all applicants, without any obligation for any further communication. The publication will be communicated by e-mail to the address indicated by the candidates in the application. The Alma Mater Studiorum - University of Bologna does not assume any responsibility for the non-receipt or the not-read of the e-mail. It is up to candidates to keep themselves informed by consulting the University website page to find necessary information about selection.

Candidates attending the interview must bring a valid identification document with them. EU citizens shall bring their passport or an identity document issued by their country of origin. Non-EU citizens shall bring their passport.
Art. 8 – Ranking list and call proposal
At the end of the exams, the Selection Board draws up the merit ranking list. In case of equal merit, priority is determined by younger age.

The eligible candidate who has achieved the highest score in the ranking will have the right to choose the research project to be developed or the location (in case the project is unique, but there are two or more locations). The eligible candidate who has achieved the next best score after the first candidate must choose among the remaining projects or locations, and so on until the last eligible candidate, who will be assigned the remaining project or location.

The general merit ranking list is approved pursuant to an administration resolution and will be published in Alma Mater Studiorum – University of Bologna Official Bulletin. The ranking list is valid for six months.

The terms to raise any appeal shall start from the date of publication of said notice, in case the resolution has not been otherwise disclosed.

The use of the ranking is bound to the study and research needs related to the SSD ING-INF/05 - Information Processing Systems, foreseen by the call.

The Department of Computer Science and Engineering - DISI, will propose the recruitment by a majority vote of the professors and associate professors of the Department and approved by the Board of Governors.

Furthermore, the Department will propose the effective date of the contract, which must be signed within the peremptory term of 90 days from the date of approval of the procedure documents.

Art. 9 – Employment procedures
Following the conclusion of the recruitment procedure referred to in art. 8, the candidates will be asked to sign a fixed-term contract of full-time employment. The contract must be signed within the peremptory term of 90 days from the date of approval of the procedure acts.

The employment relationship is governed by a personal contract, statutory laws and UE regulations. The personal contract shall specify any reasons for which it might be terminated, as well as the relevant periods of notice. In any case the contract will be terminated immediately and without notice in the event of the cancellation of the recruitment procedure to which it is inalienably linked.

The trial period shall last three months. At the end of the period, unless the employment relationship has been terminated by either of the parties, the employee is confirmed for service and the whole period worked from the beginning of the contract shall be calculated for seniority purposes.

Art. 10 – Documentation required for the participation in the public selection and for hiring purposes
For the purpose of participating in the public selection, documents and qualifications in English, French, German, and Spanish may be submitted in their original language.

However, scientific publications related to the subject area of the competition, in the case of selection procedures in language-related fields, may also be submitted in their original language. Documents and qualifications in other languages must be presented in their original language, accompanied by a certified translation in Italian or English.

The translation must be certified as faithful to the foreign text and can be carried out by the competent diplomatic or consular representation or by an official translator. As for the documentation required for employment purposes, any acts or documents drafted in a foreign language must be
accompanied by a certified translation into Italian, faithful to the foreign text, which can be carried out by the competent diplomatic or consular representation or by an official translator.

**Art. 11 – Rights and duties of a researcher with a fixed-term contract of employment**

In accordance with the rights and duties of public employees prescribed by the Italian civil code, on signing the contract the assistant professor will be expected to perform all those activities mentioned in Art. 2. These activities will be carried out in respect of the existing hierarchy and in coordination with existing programmes and research projects.

The assistant professor will perform the requested activities in person, substitution is not permitted. Existing Italian laws concerning maternity, injury and illness will be applied.

The assistant professor undertakes to fulfill the obligations of conduct prescribed by the code of conduct, issued by DPR 62/2013.

**Art. 12 – Processing of personal data and person in charge for the contest**

Information about the processing of personal data (provided during the application process) are available at the link: [www.unibo.it/privacy](http://www.unibo.it/privacy) (Notice for participants in contests and selections published by the University).

The person in charge of the selection procedure is Mr. Gianfranco Raffaeli of “Ricercatori a tempo determinato” Office - Piazza Verdi n. 3 - 40126 Bologna.

For further information, please contact: “Ricercatori a tempo determinato” Office of Alma Mater Studiorum - Università di Bologna – Piazza Verdi n. 3 - Tel. +39 051 2098972 – 2098958 – 2099980; e-mail: apos.ricercatoritempodeterminato@unibo.it.

**Art. 13 – Reference Regulations**

The present notice is issued based on the following regulations:

- Art. 24 of Law no. 240 dated December 30th, 2010;
- D.P.R. (Decree of the President of the Republic) no. 445 dated December 28th, 2000;
- Leg. Decree no. 165 dated March 30th, 2001;
- Law 241/1990;
- Regulation for fixed-term tenured assistant, issued by Rectoral Decree no. 151 of 3rd February 2023².

For the Director
Digitally signed by Giovanni Longo

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