



AMMINISTRAZIONE GENERALE  
AREA PERSONE E ORGANIZZAZIONE  
SETTORE DIDATTICA E CONTRATTI  
UFFICIO RICERCATORI A TEMPO DETERMINATO

REP 3585 PROT 53157 dated 19/12/2021

**THE DIRECTOR**

**WITH REFERENCE TO** the rules laid down in Article 13 of this Call for Applications

**ORDERS**

**Art. 1 – Purpose**

A procedure of comparative evaluation by qualifications and public discussion is called - pursuant to art. 24 paragraph 3 letter a) of Law no. 240/2010 (junior) - for the recruitment of one researcher with a fixed-term employment contract on a three-year full-time basis. Sector competition reference 09/H1 - Information Processing Systems – Subject area ING-INF/05 – Information Processing Systems -. The position is opened to meet the research and study needs of the Department of Computer Science and Engineering (DISI). Main place of service: Department of Computer Science and Engineering (DISI), Cesena.

The contract shall last three years. Annual gross amount of the contract: € 34,898.00.

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 an annual schedule of 1500 hours of activity, including 350 hours of supplementary teaching and assistance to students, for each of the academic years covered by the contract.

With reference to the by-law in art. 10 regarding temporary researchers, issued by D.R. 344 - 29/3/2011, the activities carried out by the researcher must be linked to the project entitled: "Advanced Architectures and Techniques for Business Intelligence - BI".

The project aims to explore the main research topics and trends in the Business Intelligence area; more specifically, the project will focus on:

- Advanced techniques for data analysis through the embedding of data mining algorithms in OLAP and the adoption of personalized querying processes;
- Extending BI systems to semi- and non-structured data, possibly enriched with semantic information or information obtained using Natural Language Understanding algorithms;
- Cloud and distributed architectures supporting collaborative and on-demand Business Intelligence.

Based on the project goals, the researcher will be involved in the following activities:

1. Study of innovative techniques for data analysis and, more specifically, study of new OLAP operators to exploit data mining techniques (OLAM)
2. Study of techniques for personalizing analysis session as well as navigation of the analysis results;
3. Study of algorithms for integrating semantic, semi-structured, and unstructured data in BI systems;
4. Study and development of distributed and extensible BI platforms in inter-company collaboration scenarios.

Further topics and research activities may be developed, provided they are closely linked to the Business Intelligence area.

**Scientific productivity**



Within the three-year period, the researcher shall aim to publish at least 5 papers in highly-reputed international journals or conferences and the development of at least 2 demo software.

### **Art. 3 - Admission requirements**

The selection is open to:

applicants, including those who come from non-EU countries, in possession of:

- PhD or equivalent qualification obtained either from an Italian or foreign university.

or

- Degree or equivalent, together with a scientific and professional curriculum suitable for the research work. The relevance of the curriculum will be assessed by the Selection Board.

Applicants must be in possession of the above qualification by the deadline for submission of applications to this selection procedure.

Applications from professors, adjunct professors or researchers with tenure will not be accepted, even if the applicant is no longer in service.

Applications will not be accepted from any relatives by blood or marriage up to the fourth degree of a professor of the Department of Computer Science and Engineering (DISI), or of the University Rector, General Director or of any member of the Board of Governors of the University of Bologna. State employees on unpaid leave for the entire duration of the contract, thus occupying a non-tenured 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, may apply for the research post.

### **Art. 4 – Application**

Applications for the selection shall be written on unstamped paper, using the form in annex A) and signed by the applicant.

Applications must be submitted as follows:

1. hand delivered to Alma Mater Studiorum – Area Persone e Organizzazione - Piazza Verdi n. 3, Bologna - on the following days and time:

- Monday, Tuesday, Wednesday and Friday: from 9:00 a.m. to 11:15 a.m.;

- Tuesday and Thursday: from 2:30 p.m. to 3:30 p.m.;

2. posted by registered letter with advice of receipt, or express delivery with advice of receipt to: Magnifico Rettore dell'Alma Mater Studiorum - Università di Bologna, Area Persone e Organizzazione, Settore Didattica e Contratti, Ufficio Ricercatori a tempo determinato e CEL, Piazza Verdi n. 3, 40126 Bologna.

Applications must be received by the Administration department within 60 days from the day after the day of publication of this call for application on the Gazzetta Ufficiale (Official Journal) of the Italian Republic.

Accordingly, any application delivered or received after said date, even when sent before the deadline, will be excluded. The date of the post mark will not guarantee acceptance. The date of receipt at the University shall constitute acceptance.

The receipt date is established and verified:

- in case of hand delivery: by the date reported in the receipt undersigned and issued by the person in charge of this administration;

- in case of posting: by the date of receipt written on the return receipt by the person in charge of reception.

The Administration shall not be liable for the non-delivery of communications unless otherwise caused by its employees.

Annex A contains the declarations to be made.

All applications must be accompanied by a curriculum vitae, qualifications and publications (max 20).



Pursuant to Ministerial Decree 243/11, the PhD thesis is considered a publication, thus if the candidate wishes to present it, the thesis will be counted within the maximum number indicated (i.e. 20).

Where more than the maximum number of admitted publications are presented, the Selection Board will assess only the first twenty publications listed.

#### **Art. 5 – Obligations of the Applicant**

Applications shall be excluded from the selection procedure in the following cases:

- Lack of applicant's hand-written signature at the bottom of the form;
- Non-compliance with the terms established for posting the application form;
- Non-compliance with the requirement laid down in Art. 3 of the present call for applications (qualifications).

All applicants shall be admitted to the contest 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 interviews, order the exclusion from the selection hereto.

#### **Art. 6 – Selection Board**

The Selection Board will be appointed by decision of the administration and will comprise at least three members chosen by the Department of Computer Science and Engineering (DISI) from among the professors and researchers in the subject area for which this selection procedure is issued (SSD ING-INF/05 – Information Processing Systems).

The Board shall appoint a Chairman and a recording secretary. The function of secretary may also be performed by a specifically appointed official.

The appointment will be published on Alma Mater Studiorum - Università di Bologna website.

#### **Art. 7 – Interviews**

Selection will be made by the Board after the preliminary assessment of each candidate's qualifications, curriculum and scientific production, including the doctoral thesis, according to the criteria laid down by MIUR in D.M. 243/2011.

The candidates passing the preliminary assessment 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.

Letters of reference will be considered.

The interview will be held in Italian or English, at the choice of the candidate. In the event of discussion in Italian, the candidates shall in any case demonstrate their adequate knowledge of the English language.

Following the interview, points will be assigned to each qualification and publication presented by the candidate.

The interview with the Board shall be held in public session from 19 March 2013 at 10.00 a.m. at the Computer Science and Engineering facilities - Via Sacchi 3 - Cesena and may also be held using video conference methods.

The list of candidates admitted for interview with indications of the date and time of the discussion will be published from 12 March 2013, on the University website page:

<http://www.unibo.it/Portale/Personale/Concorsi/RicercatoriTempoDeterminato/default.htm> .

To sit the interview, applicants must present a valid ID document.



EU citizens shall present their passport or an identity document issued by their country of origin. Non-EU citizens shall present their passport.

#### **Art. 7 bis – Interviews held using video conference methods**

To ensure the correct execution of any interviews held using video conference methods, the candidates shall do so via public structures identified and contacted by them; such public structures shall act as referee for the correct execution of the procedure including the identification of the candidates (for example, in Italy, the Carabinieri, the Municipio (town hall), Prefecture, Police Headquarters, national health facilities, the referee being a public official, and other universities, the referee being a full time professor or university researcher; abroad, the University with the referee being a professor or researcher; embassies or consulates, the referee being an embassy official).

To sit the interview using video conference methods, candidates must have access to a computer with an internet connection, headphones, a microphone and a web camera. The minimum bandwidth is that of an ordinary broadband system, connected via cables and not in wireless.

The compatibility of the procedure is guaranteed by the following operating systems and browsers:

#### **WINDOWS**

- 1.4GHz Intel® Pentium® 4 or faster processor (or equivalent) for Microsoft® Windows® XP or Windows 7; 2GHz Pentium 4 or faster processor (or equivalent) for Windows Vista®
- 512MB of RAM (1GB recommended) for Windows XP or Windows 7; 1GB of RAM (2GB recommended) for Windows Vista
- Windows® XP or Windows 7; Windows Vista®
- Microsoft Internet Explorer 7, 8, 9; Mozilla Firefox

#### **MAC OS**

- 1.83GHz Intel Core™ Duo or faster processor
- 512MB of RAM (1GB recommended)
- Mac OS X v10.5, 10.6 or 10.7.2 (Intel)
- Mozilla Firefox 3 or later; Apple Safari 4 or 5

#### **LINUX**

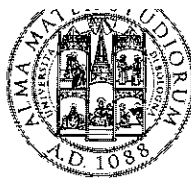
- Ubuntu 10.04; Red Hat® Enterprise Linux® (RHEL) 4.x or 5.x; Novell SUSE® 9.x or 10.x
- Mozilla Firefox 3 or later

#### **For all platforms: latest version of Adobe Flash Player**

Compliance with the principle of the public nature of the sessions shall be guaranteed by the projection of the video conference session in the physical location of the public discussion, with access via video conference to all those interested in taking part, in any case limited to the number of available accesses (max 20).

The public structures described above shall notify the name of the referees appointed to monitor the procedure, who will be enabled to the video conference and will be notified of the URL address through which they must access the procedure.

In the event of technical impediments due to a lack of connection on the day of the session, the interview may be suspended and postponed to a later date.



The aforementioned referees shall, prior to the start of the interview, verify the identity of the candidate, who shall present the original copy of the valid ID document enclosed with the application.

#### **Art. 8 – Final List**

After the interviews, the Board shall draw up the general final list based on merit.

On equal merits, priority will be allocated according to date of birth, and the younger candidate shall prevail.

The list based on merit is approved by decision of the administration and will last three years. It will be published in the Official Bulletin of the Alma Mater Studiorum – University of Bologna.

The terms for appeal start from the date of publication of the notice, if the decision is not otherwise disclosed.

The use of the final list of candidates is strictly bound to the study and research related to the Subject Area SSD ING-INF/05 – Information Processing Systems.

The Department of Computer Science and Engineering (DISI) will recruit the proposed candidate by majority vote of the professors and associate professors of the Department, approved by the Administrative Board. Furthermore, the Department will propose the date of commencement of employment contract.

#### **Art. 9 – Employment**

After the conclusion of the recruitment procedure referred to in art. 8, the applicant will be asked to enter into a personal contract aimed at establishing a fixed-term employment relationship on a full-time basis.

The personal contract, statutory laws and community regulations shall govern the employment relationship.

The personal contract shall specify any reasons for which it might be terminated, as well as the relevant periods of notice. Should the recruitment procedure be annulled, the contract shall terminate without prior notice, since said procedure is a prerequisite.

The trial period shall last three months. If neither party terminates the contract after such period, the service shall be deemed to be confirmed and the employee will be recognised the length of service from the hiring day for all purposes.

#### **Art. 10 – Required documents**

All the documents written in any foreign language shall be accompanied by a true and correct translation into Italian, written by an Italian consular, qualified diplomatic representative or 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 provided for by the Italian Civil Code, on signing the contract the researcher will be expected to perform all the activities listed in Art 2. These activities will be carried out respecting the existing hierarchy and in coordination with existing programmes and research projects.

The researcher will perform the requested activities in person; substitution is not permitted.

Existing Italian laws concerning maternity, injury and illness will apply.

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

The personal data presented by applicants through their application form for the purposes of the contest, under Italian Leg. Decree no. 196/2003, will be processed for the purposes of this call for applications and any hiring procedure.

The person in charge of the procedure is Mrs. Giuseppina Caliendo Responsabile del Settore Didattica e Contratti - Piazza Verdi 3 - 40126 Bologna.



For further information, please contact: Ufficio Ricercatori a tempo determinato e CEL dell'Alma Mater Studiorum - Università di Bologna – Piazza Verdi n. 3 - Tel. +39 051 2098972 – 2098958 - 2098950, Fax 051 2098980; e-mail: [apos.ricercatoritempodeterminato@unibo.it](mailto:apos.ricercatoritempodeterminato@unibo.it).

### Art. 13 – Reference Regulations


The present notice is issued based on the following regulations:

- Art. 24 of Italian Law no. 240 of 30 December 2010;
- D.P.R. (Italian Presidential Decree) no. 445 of 28 December 2000;
- Leg. Decree no. 165 dated 30 March 2001;
- Italian Law 241/1990;
- Regulation for fixed-term researchers of Alma Mater Studiorum – Università di Bologna,

(link:

[http://www.normateneo.unibo.it/NormAteneo/Regolamento\\_ricercatori\\_a\\_tempo\\_determinato.htm](http://www.normateneo.unibo.it/NormAteneo/Regolamento_ricercatori_a_tempo_determinato.htm)).

Bologna, 19/12/2012

Signed:  The Director  
(Michele Mennar)

A

In their applications, candidates shall declare under their own responsibility:

1. surname and name;
2. place and date of birth;
3. citizenship;
4. (if Italian citizens) registration in the electoral register, specifying in which Municipality and identifying, if any, the reasons why he/she is not registered or cancelled from them;
5. that there have not been any criminal proceeding against them or current criminal proceedings; otherwise, applicants shall specify the proceedings against them and the judgement date of the regulatory bodies which gave rise to them (in addition, specify any amnesty, pardon or expungement etc. granted) and pending criminal proceedings;
6. possession of the required qualification pursuant to Art. 3 of this call for applications and the grade obtained;
7. that they are fit for the employment the selection refers to;
8. that they are not, nor have been, professors, associate professors or researchers with tenure, even if no longer in service;
9. that they are not related by blood or marriage up to the fourth degree of a professor of the Department of Computer Science and Engineering (DISI), the Rector, General Director or any member of the Board of Governors of the University of Bologna;
10. elected domicile for the purpose of participation in this procedure, as well as a telephone number and an e-mail address;
11. applicants shall enclose their curriculum vitae, dated and signed, and a photocopy of a valid ID document.
12. the chosen language for the public discussion.
13. the chosen method for the interview.
14. in the event of the video conference method being chosen, indication of the public structure the session will be held at and the name of the referee.



Foreign citizens shall also declare that they have adequate knowledge of the Italian language and enjoy civil and political rights also in their countries of origin (or state the reasons for loss of enjoyment).

The application form shall be signed at the bottom. Said signature does not require any authentication pursuant to Art.38 of DPR 445/2000.

Any modification shall be promptly notified to the Ufficio Ricercatori a tempo determinato e CEL.

The following documents shall be enclosed with the application form:

1. photocopy of a valid ID document;
2. curriculum of the scientific-professional activity, dated and signed;
3. any qualification considered useful for the purposes of the selection, with relevant dated and signed list;
4. reference letters, if any;
5. scientific publications (max 20) which have already been published by the deadline for submission of applications, or scientific publications accepted for printed, with relevant numbered, dated and signed list as well as the authors' names, titles, date and place of publication, number of collection or volume and reference year.

The qualifications applicants intend to submit shall be either original or, for EU citizens, an authenticated copy, or shall be certified by the applicant, pursuant to Art. 46 and Art. 47 of D.P.R. no. 445 dated 28.12.2000, by way of a declaration of certifications (Annex B) or sworn affidavit (Annex C).

6. confirmation of acceptance by the public structure identified by the candidate, with indication of the referee appointed to ensure the regular execution of the procedure and a photocopy of his/her ID document (only when requesting video interviews).

