Università
Ca'Foscari
Venezia

**Dipartimento di Scienze Ambientali,
Informatica e Statistica**

Dipartimento di Scienze Ambientali, Informatica e Statistica
Università Ca' Foscari Venezia
Campus Scientifico – Via Torino 155, 30170 Mestre (VE)
P.IVA 00816350276 - CF 80007720271
www.unive.it/dais

Research fellowship on Study and development of innovative Machine Learning techniques for radio signal analysis. - Università Ca' Foscari Venezia
(Italian law 30 December 2010, n.240, art. 22 and subsequent amendments and additions)

The present document in English is to be considered as a mere summary of the main provisions of the notice of competition which is available in Italian at the following (link) The text in Italian is the official text of the notice of competition for all legal intents and purposes and, in the event of non-conformity with the present document, it shall prevail.

Description
The Department of Environmental Sciences, Informatics and Statistics at Università Ca' Foscari Venezia invites applications for a fellowship in:

- *Title: Study and development of innovative Machine Learning techniques for radio signal analysis.*
- *scientific disciplinary sector and/or disciplines specifically identified by the call: INF/01*
- *scientific coordinator and tutor: dott. Luca Cosmo*
- *duration: 12 months*
- *abstract: The aim of the research grant is to employ and develop new machine learning techniques capable of operating on images and non-Euclidean structures (i.e., graphs) for signal analysis. In particular, the research will be of support to the long-term objective of the EYE-FI.AI project, which is to analyze the interference caused by objects and humans on an electromagnetic signal in order to perform tasks such as object or person recognition, reconstruction of the area occupied by a person, and recognition of simple actions from observations of the signal behavior over time.*

The research may be carried out in English.
The fellowship is intended to provide the successful candidate with the opportunity to pursue his/her own research while benefiting from the range of expertise at Università Ca' Foscari Venezia.

Who can apply

Prospective candidates are expected to hold a master's degree in computer science, or related disciplines.

Ca' Foscari encourages applications from researchers with positive evaluation in all the criteria in individual proposals such as Marie Skłodowska Curie Actions - Individual Fellowships/ERC Starting Grants/FIRB (Italian Fund for basic research investments)/SIR (Scientific Young Independence Research) or similar.
Researchers having successfully completed Marie Skłodowska Curie Actions - Individual Fellowships/ERC Starting Grants/FIRB (Italian Fund for basic research investments)/SIR (Scientific Young Independence Research) or similar funded projects are warmly encouraged to apply.

Duration of contract: 12 months approximately starting: December 2023.

Stipend: The research fellowship amounts to 19.367,00 Euros per year, including taxes and social charges.

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Deadline for submission of applications: November 13th, 2023 at 12:00 noon.

How to apply:

Candidates shall submit:

1. The application form where the candidate must declare his/her surname and first name, date and place of birth, taxpayer's code and residence, e-mail and/or certified e-mail address (if possessed) and the elected domicile for the purposes of the selection. Any change in these data must be promptly communicated.

 in addition to the above, candidates must declare:

a. the title of the fellowship;
b. the scientific disciplinary sectors;
c. the possession of a master's degree or equivalent title obtained abroad. Candidates in possession of a qualification obtained abroad must also submit a copy of the foreign title with a translation in Italian or English language including marks obtained, accompanied by a self-declaration relating to the conformity to the original of the translation itself. The candidate who has been awarded a Diploma Supplement, may not submit any other documentation, provided that the DS provides a complete description of the nature, level, academic system and status of the studies carried out. In any case, it is advised to submit any other document useful to the evaluation of the academic title obtained;
d. the possession of a PhD, with the date on which it was obtained and the University where the course was held. Candidates must also submit a copy of the foreign title with a translation in Italian or English language including marks obtained, accompanied by a self-declaration relating to the conformity to the original of the translation itself;
e. nationality;
f. to be medically fit to discharge his/her duties for the fellowship;
g. to have/have not criminal conviction and/or being/not being currently involved in criminal proceedings. On this regard, the University reserves the right to assess at its discretion, for the purposes of the possible exclusion of the candidate from the selection, the seriousness of the criminal convictions declared and those that may occur as a result of the ongoing criminal proceedings
h. whether he/she received a PhD fellowship;
i. whether he/she has already received a research fellowship under art. 22 of law no. 240/2010;
j. whether he/she has already held contracts under art. 24 of law no. 240/2010;
k. the possession of a residence permit valid at the deadline of the call for applications, in case he/she is a non-European citizen residing in Italy;
l. the consciousness that awarding of the fellowship is not compatible with the positions referred to in art. 11, with the exception of the provisions of the Regulations on University research fellowships awarding and the current legislation;
m. the preference of the foreign language/s in which to be tested during the interview, if art. 5 of this call offers a choice of foreign languages;
n. the possession of the evaluation criteria listed in art. 5;
o. the request to be interviewed and take the other foreseen tests in English if specifically foreseen by this call;
p. any other item specifically required by the application form;

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q. disabled candidates, in accordance with the law of February 5th 1992 no. 104 and subsequent amendments and additions, shall make a specific request in relation to their disability, concerning any aids they require in order to take any tests and sit the interview

2. A motivation letter (max 1 page) along with their CV in European format, duly dated and signed, both to enclosed as a one single.pdf file (link); a declaration must be appended in the footnote of the curriculum, pursuant to the Italian DPR 445/2000 and subsequent amendments and additions, that the information provided corresponds to the truth. Moreover the candidates have to consent to the use of their personal data for the purposes of this selection procedure pursuant to the Italian Legislative Decree 196/2003 and to the EU Regulations 2016/679;
3. The attachments called "obligations and understanding" and "participation and compatibility";
4. All documents, qualifications and publications relevant for the selection procedure (please, see the notice - link);
5. A copy of a valid identity document (either Identity Card or Passport);
6. (If available) Evaluation Summary Reports of Marie Skłodowska Curie Actions - Individual Fellowships/ ERC Starting Grants/FIRB (Italian Fund for basic research investments)/SIR (Scientific Young Independence Research) individual proposals having passed all the evaluation thresholds;
7. (If available) Details of Marie Skłodowska Curie Actions - Individual Fellowships, ERC Starting Grants, FIRB (Italian Fund for basic research investments)/ SIR Scientific Young Independence Research funded projects;
8. Declaration on availability to held the interview in remote (Link) to be send via email at the following address: segreteria.dais@unive.it with the object: Study and development of innovative Machine Learning techniques for radio signal analysis – dott. Luca Cosmo.

All the schemes of the quoted documentation are available on the website (link).

Incomplete applications will be rejected.

How to submit your application

Applications should be submitted by the online procedure, available on the notice webpage (link)
Or submit here:
https://apps.unive.it/domandeconcorso-en/accesso/dais2023cosmomachinelearning

The candidate, after the uploading, will receive a submission number and an e-mail acknowledging receipt of his/her application.
The candidate if necessary could access the procedures for updating any data and materials by the link provided by the e-mail, in any case any updates must be made no later than the deadline November 13th, 2023 at 12:00 noon.
Please note that the University can be contacted for any support needs by the candidate until 24 hours prior to the deadline.
Please note that in case of a high number of applications and / or weight of the materials loaded by the candidates the system might become slower, Therefore it is suggested not to start the process close to the deadline.

NB: the University does not take on responsibility for wrong or late communication of addresses, nor for any communication problem not depending on the University.

Evaluation

Up to 100 points, specifically:
For qualifications, publications and possible tests, from 0 to 60;

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For interview, from 0 to 40.

Selection procedure

Selection procedure
Short-listed candidates will be invited for interview on November 17th, 2023 at 13:00 Italian time
The interview will be held in remote only. Further details on how to connect online will be published alongside the convocation notice.
The list of candidates admitted to the interview or any postponement will be announced on November 14th, 2023 by notice that will be published on the website of this university (link) and on the web pages foreseen by current legislation.

This communication constitutes to all intents and purposes an official call and candidates will not receive any call or home communication. Therefore, candidates are required to present themselves, at the online interview, with a valid identification document, without prior notice, on the days and times indicated here. Any postponements will be made known on the day by means of a notice which will be published on the website of this university (link) and on the web pages envisaged by current legislation.

The interview:
The interview questions will cover:

- Machine Learning,
- Neural Networks,
- Geometric Deep Learning,
- Generative AI,
- Good knowledge of Italian,
- Good knowledge of English

Information
The grant holder must express acceptance within 7 days from receiving the communication and must sign the relevant contract at the competent office. The grant holder will be sign the relevant contract by affixing remote digital signature (https://www.agid.gov.it/it/piattaforme/firma-elettronica-qualificata/ottenere-firma-elettronica). In the impossibility of acquiring the digital signature remotely, it will be possible to proceed with the acquisition of the signature by correspondence or in presence at the secretariat of The Department of Environmental Sciences, Informatics and Statistics.
(1) The contract will be considered completed and fully effective between the parties, after the acquisition of all the signatures and the repertory of the deed.
- The contractor must attach a photocopy of the identity card.

Information and contacts

Candidates may find further details about the application process and the research project in the official call published on the following (link)
For further information please contact Segreteria del Dipartimento di Scienze Ambientali, Informatica e Statistica Tel 041/2348526 - 041/2348531 – segreteria.dais@unive.it

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The head of the Department of
Scienze Ambientali, Informatica e Statistica
Prof. Salvatore Orlando

Digitally signed