

ANNOUNCEMENT OF PUBLIC SELECTION FOR N° 1 GRANT FOR RESEARCH
(Italian law 30 December 2010, n.240, art.22)

Description

The Scuola Normale Superiore announces a selection, based on work to date, for a research contract named “*Mean Field Games aspects of training deep neural networks and the use of deep neural networks for solving Mean Field Games*” as part of the project “*Mean Field Games aspects of training residual networks*”.

In particular, the research will be focused on the study of the training of deep neural network via the Mean Field Games approach and/or on the use of deep neural network to solve Mean Fields Games problems. A special emphasis will be put on the mathematical aspects of the two approaches. The research will be developed under the direction of the scientific director Dr. Giulia Livieri.

Duration of the contract: 1 year (estimated starting: February 2022)

Gross remuneration, inclusive of all taxes: € 29,000

Application deadline: the application must be registered online by 23.59 (Italian time) of 23 December 2021.

Applications received and registered online after the deadline, for reasons not attributable to the Scuola, will not be admitted to the selection.

Information about the selection procedure can be found below. Candidates are invited to read the official announcement (*Bando*) and to follow exclusively its detailed instructions should they decide to apply.

Requisites

Applications are invited from candidates who meet the following requisites, which are both mandatory:

- to have completed a Master’s degree in Physics, Computer Sciences; Mathematics; Economic, Statistical and Social Sciences; Statistical and Economic Sciences; Statistics (in accordance with earlier Italian university regulations, or a second-cycle undergraduate degree as per the interdepartmental decree of 9 July 2009). Candidates who have completed the aforementioned degrees abroad may also apply, if said degrees are recognized as equivalent to Italian degrees;
- to have carried out at least 2 years of post-graduation research activity in the above-mentioned scientific fields.

Knowledge of English language is also required to carry out the research activity.

Additional competence and/or experience relevant to the choice of the researcher: PhD in Mathematics, Financial Mathematics, Physics, Economics, Statistics.

How to apply

Candidates with all the aforementioned requisites who wish to participate in the selection process must submit their application using exclusively the online procedure (SerSe) available on the Scuola’s website at <https://serse.sns.it/en/>. No other submission method will be accepted.

At first candidates shall register themselves in SerSe and then, once received a confirmation email to the email address indicated by them, they shall select on the homepage the specific call they are interested to. Candidates having already registered themselves in SerSe shall use the same access credentials to enter in the online procedure and submit their application.

For internal users or external users with SPID, it will be possible to log in SerSe with SPID or SNS credentials instead of SerSe credentials.

The email address indicated by candidates during the online registration or application submission is the official means of communication relating to this selection. Any change must be communicated promptly to the email address job.opportunities@sns.it.

The online application must include also the following documents:

- a) the scanned copy of a valid identification document (mandatory – the document shall not exceed 1 Mb);
- b) a curriculum vitae containing a detailed description of the studies and professional experience (mandatory);
- c) the publications, including also the PhD thesis, and any other document that the candidate believes may be useful to the evaluation of her/his application (it is mandatory to attach the publications that the candidate intends to submit to the evaluation of the Committee);
- d) a list of the submitted publications (mandatory).

In order to submit the documents listed above, candidates shall upload them exclusively as PDF files (only PDF format will be accepted). Only if direct upload is not possible, exceptionally one or more publications can be provided extra online procedure, delivering them by registered mail or courier to the following address: Ufficio Protocollo of the Scuola Normale Superiore, Via del Castelletto, n. 11, 56126 Pisa (Italy).

For those unpublished texts accepted for publication, the candidate must include the relative document in its final form and the publisher's certificate or a detailed substitute statement of affidavit confirming that the relative text has been accepted for publication (please use attachment A).

In the online application, candidates may also indicate up to 3 experts in the field of research, to whom the Scuola Normale will ask to send a letter of reference to be received by 23:59 (Italian time) of 27 December 2021.

After the online application has been received and registered, it will not be possible for candidates to change or integrate it with further documents.

In case of problems in registering the online application, for administrative information or questions, candidates can write an email to job.opportunities@sns.it.