Bucharest University of Economic Studies

ANNOUNCEMENT

Bucharest University of Economic Studies is currently holding a selection process for **one (1) Postdoctoral Researcher** position for the ***"AI for Energy Finance (AI4EFin)"*** project-760048/23.05.2023, code 162/15.11.2022.

The employment offered for this position is part-time, with a maximum of 80 working hours per month, which may be unevenly distributed.

The gross hourly wage for this position is 120.75 lei per hour.

The individual contracts of employment will be concluded for a fixed period of 12 months, with an evaluation carried out at the end of the period. There is also a possibility of extension of the contract until 30 June 2026.

A. In order to enter the selection, candidates need to fulfil the following **general and specific conditions:**

1. General conditions:

a) has Romanian citizenship, citizenship of other member states of the European Union, of states belonging to the European Economic Area and/or foreign states as defined by art. 2 lit. a) of GEO 194/12.12.2002 with subsequent amendments and completions, respectively persons who do not have Romanian citizenship, citizenship of another EU member state or citizenship of the Swiss Confederation;

b) minimum age stipulated by law;

c) has full capacity;

d) meets the conditions of education and, where appropriate, seniority or other specific conditions by the requirements of the post to be filled;

e) has not been convicted of a crime against humanity, against the State or authority, or of an offence committed in the course of or in connection with the performance of his or her duties which obstructs the course of justice, or forgery or corruption, or of an offence committed with intent which would make him or her incompatible with the performance of his or her duties, unless he or she has been rehabilitated.

2. Specific conditions:

a) level of studies: higher education, PhD diploma completed

b) area of studies: economy, business administration, cybernetics and statistics, economic informatics, finance, statistics or similar

c) **Mandatory condition***: The candidate must hold a doctoral degree and have research experience of no more than 8 years full-time equivalent, from the date of award of the first doctoral degree, and, but not exceeding 10 years full-time equivalent under the conditions laid down by the European Research Executive Agency (REA).*

The date of obtaining the first doctoral degree is calculated according to the date of the call.
In the case of this selection process, the date of obtaining the first doctoral degree (the date of the minister's order) should not be prior to 15.09.2014.

d) Other specific conditions:

Responsibilities:

- Conduct research and development in the field of energy finance, focusing on the interdependency of energy and financial markets.
- Collaborate with interdisciplinary teams, including economists, policymakers, and industry experts, to provide insights and guidance for decision-making in energy finance and policy formulation.
- Publish research findings in reputable academic journals and present at conferences/workshops.
- Contribute to quantinar.com and the social media strategy of the research project.

Requirements:

- A Ph.D. degree in a relevant field such as computer science, applied mathematics, statistics, finance, or a related discipline.
- Strong expertise in machine learning, artificial intelligence, and data analysis techniques.
- Extensive knowledge of energy finance, including understanding the interdependency between energy and financial markets.
- Proficiency in programming languages such as Python (preferred) or R.
- Strong analytical and problem-solving abilities.
- Good communication and collaboration skills to work effectively within a multidisciplinary team.

B. The Selection will consist of:

Step 1: Evaluation of the files submitted by the candidates;

Step 2: Structured interview (if there are not at least 2 candidates, the selection committee may decide to simplify the procedure and make the selection without the interview stage):

- *The date and time of the interview* will be communicated concurrently with the results of the evaluation of the files submitted by the candidates;

- *The place of the interview* will be communicated simultaneously with the results of the evaluation of the files submitted by the candidates.

The samples are eliminatory; the minimum score to be obtained for each sample is 50 points.

C. Topics and bibliography:

1. **Topics:**
   1. Energy Finance
   2. Artificial Intelligence
   3. Explainable deep neural networks
   4. Machine Learning
   5. Risk management

2. **Bibliography:**
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4. Craja, P., Kim, A., & Lessmann, S. (2020). Deep learning for detecting financial statement fraud. *Decision Support Systems*, *139*, 113421. https://doi.org/https://doi.org/10.1016/j.dss.2020.113421
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10. Lux, M., Härdle, W. K., & Lessmann, S. (2019). Data Driven Value-at-Risk Forecasting using a SVR-GARCH-KDE Hybrid. *Computational Statistics*, *35*, 947-981. https://doi.org/10.1007/s00180-019-00934-7
11. Schirmer, M., Eltayeb, M., Lessmann, S., & Rudolph, M. (2022, July 17-23). Modeling Irregular Time Series with Continuous Recurrent Units.*Proceedings of Machine Learning Research* Proc. of the 39th Intern. Conf. on Machine Learning (ICML'2022), PLMR, Baltimore, MD, USA. https://proceedings.mlr.press/v162/schirmer22a.html

12. Srivastava, S., & Lessmann, S. (2018). A comparative study of LSTM neural networks in forecasting day-ahead global horizontal irradiance with satellite data. *Solar Energy*, *162*, 232-247. https://doi.org/10.1016/j.solener.2018.01.005

1. Srivastava, S., & Lessmann, S. (2018). A comparative study of LSTM neural networks in forecasting day-ahead global horizontal irradiance with satellite data. *Solar Energy*, *162*, 232-247. https://doi.org/10.1016/j.solener.2018.01.005

D. Contents of the competition file to be submitted by candidates:

1. A record of the enclosed documents

2. Application for the recruitment and selection process addressed to the Rector of ASE;

3. Declaration on own responsibility if the candidate has or does not have a husband/wife or relatives and affines, up to the III-th degree inclusively, who are employees of the Academy of Economic Studies of Bucharest in a position of leadership, control, authority with the post taken out for selection and not the post, to which they apply, is not in a position of leadership, control, authority with husband/wife or relatives, up to and including III degree, employees of the University;

4. Statement for the processing of personal data;

5. Copy of the identity document or any other document attesting the identity, according to the law, as the case may be;

6. Copy of marriage certificate or proof of name change, if the candidate changed his name (proof of name change);

7. The criminal record or a self-declaration that it has no criminal record that makes it incompatible with the position for which it is applying;

8. Medical certificate attesting the appropriate health status issued no more than 6 months prior to the selection by the family doctor of the candidate or by the competent medical units, or the declaration on its own responsibility, with the obligation to fill in the selection file with the medical certificate at the latest by the date of the first test of the recruitment and selection process, if applicable;

9. Curriculum vitae in European format (www.cveuropean.ro/cv-online.html) – signed and dated on each page;

10. Copy of the graduation diploma of the faculty;

11. Copy of the master's degree;

12. Copy of the doctor's degree;

13. Possible copies of other documents/acts (if the candidate owns), attesting to the performance of professional specializations/training, certifying the fulfilment of the other specific conditions provided for the occupation of the post, which are referred to in Chapter A, point 2, point d).

E. Contact information:

The competition files will be submitted by April 01, 2024, at 16:00 at the BUES Registrar's Office, located in the "Ion Angelescu" Building, Caderea Bastiliei Street., ground floor, room 0016.

Contact person: University professor Ph.D. Daniel Traian Pele (email: danpele@ase.ro)

The requested form models can be found on the website of the Non-reimbursable Project Management Service, Resources section, by accessing the link: https://fondurieuropene.ase.ro/resurse/.

F. Selection calendar:

No. crt.	ACTIVITY	Date
1.	Submitting the candidates' competition files at the ASE Registrar's Office and verification of the documents in the file	Until 01.04.2024 (16:00 time)
2.	Selection of application files by the members of the competition committee	02.04.2024
3.	Publication of the results of the selection of the application files	02.04.2024
4.	Submission of appeals regarding the results of the selection of application files	03.04.2024
5.	Publication of the results of the appeals	04.04.2024
6.	Interview	05.04.2024
7.	Communication of the results after the interview	08.04.2024
8.	Submission of appeals regarding the interview results	09.04.2024
9.	Publication of the results of the appeal	10.04.2024
10.	Publication of the final results	10.04.2024
11.	Appointment to the position	After approval from the Board of Trustees

MINISTERUL CERCETĂRII, INOVĂRII ȘI DIGITALIZĂRII

Instrucțiunea nr. 2260

privind clarificarea noțiunii de „*post-doctorand*"
în cadrul proiectelor aferente investițiilor Componentei 9 „Suport pentru Sectorul Privat, Cercetare, Dezvoltare și Inovare" din Planul Național de Redresare și Reziliență

Luând în considerare prevederile cadrului legal aferent Programului Național de Redresare și Reziliență 2021-2026, respectiv:

a) Regulamentul (UE) 2021/241 al Parlamentului European și al Consiliului din 12 februarie 2021 de instituire a Mecanismului de redresare și reziliență;

b) Regulamentul (UE) 2021/240 al Parlamentului European și al Consiliului din 10 februarie 2021 de instituire a unui Instrument de sprijin tehnic;

c) Decizia de punere în aplicare a Consiliului din 3 noiembrie 2021 de aprobare a evaluării Planului de Redresare și Reziliență;

d) Acordul privind contribuția financiară și Acordul de împrumut, încheiate în cadrul Mecanismului de Redresare și Reziliență pentru finanțarea Planului Național de Redresare și Reziliență, denumit în continuare PNRR;

e) Ordonanța de urgență nr. 124/2021 privind stabilirea cadrului instituțional și financiar pentru gestionarea fondurilor europene alocate României prin Mecanismul de redresare și reziliență, precum și pentru modificarea și completarea Ordonanței de urgență a Guvernului nr.155/2020 privind unele măsuri pentru elaborarea Planului Național de Redresare și Reziliență necesar României pentru accesarea de fonduri externe rambursabile și nerambursabile în cadrul Mecanismului de redresare și reziliență;

f) Hotărârea Guvernului nr.209/2022 pentru aprobarea Normelor metodologice de aplicare a prevederilor Ordonanței de urgență a Guvernului nr. 124/2021 privind stabilirea cadrului instituțional și financiar pentru gestionarea fondurilor europene alocate României prin Mecanismul de Redresare și Reziliență, precum și pentru modificarea și completarea Ordonanței de urgență a Guvernului nr. 155/2020 privind unele măsuri pentru elaborarea Planului național de redresare și reziliență necesar României pentru accesarea de fonduri externe rambursabile și nerambursabile în cadrul Mecanismului de redresare și reziliență;

g) Acordul de finanțare nr. 39991/06.04.2022 privind implementarea reformelor și/sau investițiilor finanțate prin Planul național de Redresare și Reziliență, încheiat între Ministerul Investițiilor și Proiectelor Europene (MIPE) și Ministerul Cercetării, Inovării și Digitalizării (MCID).

Având în vedere:

- Prevederile contractelor de finanțare, conform cărora Beneficiarii au obligația de a respecta Instrucțiunile emise de către Ministerul Cercetării, Inovării și Digitalizării în calitate de Coordonator de reforme și/sau investiții;

- Regulamentul de Organizare şi Funcţionare a Ministerului Cercetării, Inovării şi Digitalizării, aprobat prin OMCID nr. 20492/10.05.2022, cu completările ulterioare;

-Referatul de aprobare nr. 750372/01.11.2023 privind clarificarea noţiunii de „post-doctorand" în cadrul proiectelor aferente investiţiilor *Componentei 9 „Suport pentru Sectorul Privat, Cercetare, Dezvoltare şi Inovare" din Planul Naţional de Redresare şi Rezilienţă*

În temeiul art. 12 alin.(3) din Hotărârea Guvernului nr. 371/29.03.2021 privind organizarea şi funcţionarea Ministerului Cercetării, Inovării şi Digitalizării, cu modificările şi completările ulterioare

Ministrul Cercetării, Inovării şi Digitalizării emite prezenta

Instrucţiune

Art. 1. Beneficiarii contractelor de finanţare semnate cu Ministerul Cercetării, Inovării şi Digitalizării (MCID) în calitate de Coordonator de Reforme şi/ sau Investiţii (CRI), şi care sunt finanţate din Componenta 9 "Suport pentru sectorul privat, cercetare, dezvoltare şi inovare", vor interpreta sintagma „*cercetător post-doctorand*" ca fiind „*persoana care, la data apelului, deţine o diplomă de doctor şi are experienţă în cercetare de cel mult 8 ani echivalent normă întreagă, de la data primei diplome de doctorat, dar fără a depăşi 10 ani echivalent normă întreagă în condiţiile prevăzute de Agenţia Executivă Europeană pentru Cercetare (REA)*".

MINISTRU,

BOGDAN - GRUIA IVAN

EUROPEAN RESEARCH EXECUTIVE AGENCY (REA)

REA.A - Marie Skłodowska-Curie Actions & Support to Experts
A.2 - MSCA European Postdoctoral Fellowships
A.4 - MSCA and citizens, COFUND, Global Postdoctoral Fellowships

Subject: Guidelines on the calculation of 8-years research experience in Postdoctoral Fellowships under Horizon Europe

1. BACKGROUND

In the framework of the Horizon Europe Postdoctoral Fellowships (PF) 2021 call, applicants, at the date of the call deadline, must:

- be in possession of a doctoral degree
- have a maximum of 8 years full-time equivalent (FTE) experience in research, measured from the date of award of the first doctoral degree. All applicants that have received their PhD after 12/10/2013 are automatically eligible to apply provided the remaining eligibility criteria are met.

The rule of the 8 years full-time equivalent experience in research after the PhD can be extended (in days) for the following reasons:

- **Maternity leave** (18 months – i.e. 548 days for each child born after the PhD award date unless the applicant can document a longer parental leave prior to the call deadline;
- **Paternity leave** (the documented time of parental leave taken until the call deadline for each child born after the PhD award date);
- **Research in a non-associated Third Country** (only for nationals or long-term residents of Member States or Associated Countries, wishing to reintegrate in Europe) – **only for European Postdoctoral Fellowships**
- **Career break**;
- **Compulsory national service**;
- **Time spent not working in research (career breaks are not included in this section).** The period spent in a non-research position should be completely deducted from the FTE experience in research. However, for a period spent in a research position, the time spent outside of your main research activity (including teaching) could be deducted as a percentage of FTE provided that it can be documented by e.g. work contract/job description and quantified based on documentation/proof which the host organisation (beneficiary) needs to keep for their records (not to be included in the proposal). Please use the embedded calculator in the wizard for each of your employment contract(s) for a calculation of the FTE to be deducted from the research experience.
- **Long term sick leave** (periods > 30 days);

This document, together with the corresponding self-assessment tool, aims to guide the applicants towards calculating the possible deductions of their 8 years FTE experience in research.

Please note that in case of a successful application you might be requested at any stage to provide appropriate documentation to prove your eligibility claims.

2. SELF-ASSEMENT TOOL

The tool comprises a series of steps in logical sequence in order to determine the deductions of the 8 years FTE experience in research, as well as the FTE of non-research experience that was conducted during time spent working in research.

STEP 1: Fill in the information concerning the "Date of your PhD Award" and your "Gender".

The tool automatically calculates the time passed from your PhD date and gives an answer ("OK" or "NOT OK").
Step two is applicable only if the answer in the STEP 1 was "NOT OK".

STEP 2: If needed (answer "NOT OK" to step 1), fill in the relevant boxes with days to be deducted from your 8 years FTE experience in research.

If applicable, you may also provide the number of days of non-research experience that was spent during your research career. The calculator helps you deduct such type of activities by quantifying the percentage (%) spent on them.

The tool automatically sums up the days and gives you an answer ("OK" or "NOT OK").

3. EXAMPLES

A female researcher has received the PhD 10 years before the call deadline and had two children (2 x 548 days). In total, she can deduct 1096 days and is eligible to apply.

A researcher has received the PhD 10 years before the call deadline and spent 1 year being unemployed (career break - 365 days). In total, he/she can deduct 365 days and is not eligible to apply.

A researcher has received the PhD 10 years before the call deadline and spent 5 years (5 x 365 = 1825 days) doing teaching-only activities (100%). In total, he/she can deduct 1825 days and is eligible to apply.

A researcher (that applies for an EF) has received the PhD 15 years before the call deadline and spent 5 years working outside research (1,825 days). He/she also worked 10 years in research (3,650 days), out of which he/she spent 60% of the time in non-research activities as documented in his/her work contract(s). In total, he/she can deduct 4,015 days **(1,825 + 2,190 [60% of 3,650])** and is eligible to apply.

Disclaimer:

The self-assessment tool is based on the MSCA-PF Work Programme and Guide for Applicants. It is not a formal clearance of eligibility and it is provided as an example of calculation for information purposes only. Full eligibility checks may be performed by REA at any stage after the call deadline against the parts A and B of the submitted proposal.

When filling the relevant category for deduction make sure you do not deduct the same period in multiple categories. Please note that the applicant remains solely responsible for the eligibility of the fellow. Ensure that correct and consistent data are entered in the parts A and Part B of the proposal as only these data will be taken into account for the eligibility check. The data entered as deduction from the research experience must be documented and quantified based on documentation/proof which the host organization (beneficiary)needs to keep for their records.

Calculations are done based on 1 year = 365 days.

Any PhD awarded after 12/10/2013 automatically complies with the 8-year rule.