

## Research Assistant CREST – Prof. Francis Kramarz, ERC FIRMNET

### *Job Details*

Starting date: August/September 2022

Location: Palaiseau, France

One-year (11 to 12 months) fixed term contract, full-time, gross salary of 2,139.18€ / month.

### *About CREST*

CREST is a joint research center gathering faculty members of ENSAE and Ecole Polytechnique, Economics Department. Members conduct research in Economics, Finance, Statistics and Sociology. It is located on the campus of Ecole Polytechnique, in Palaiseau, 20km South of Paris.

### *Job Description*

The research assistant (RA) will support Professor Francis Kramarz (Professor of Economics at ENSAE) on the FIRMNET project funded by the European Research Council, related to firm networks in a globalized environment. The research focuses on how business networks help firms to be resilient in the face of shocks. The RA will mainly work on three components:

- 1) The first is concerned with the analysis of European buyer-seller relations within international trade networks, evaluating the transmission of exogenous shocks and their effects on workers' and firms' outcomes in France over a period of 25 years. The RA will be required to work with large firm-level datasets provided by the French administration (DADS, FICUS/FARE, Customs Data), performing a diverse set of empirical tasks using Stata (and occasionally, SAS). This may include data cleaning, running consistency checks, merging datasets, preparing data for analysis, programming algorithms for identification, running regression analyses etc.
- 2) The second component aims to revise a paper (currently under peer-review) featuring a general equilibrium model of international trade with heterogeneous firms. The RA could be conducted to help write/re-write programs for the estimation of structural parameters based on simulated method of moments, using Stata and Matlab. This part of the project is in collaboration with professors at Pennsylvania State University and Yale University.
- 3) The third component aims at developing a general equilibrium model of international trade with heterogeneous firms, Bertrand pricing and rent-sharing between workers and firms to explain wage differentials between similar workers employed in different firms. The RA will assist in writing programs for the estimation of structural parameters, using Stata, Matlab and Python. This part of the project is in collaboration with a PhD student at CREST as well as professors at Pennsylvania State University and Yale University.

For more information on the projects, visit: <https://sites.google.com/view/ercfirmnet> (in particular, WP2 and WP3).

Under the close supervision of the principal investigator, the RA will hence conduct different research-related tasks all along the research process, assisting in the preparation and revision of academic papers being submitted to journals. Since data access is confidential and therefore on-site, the RA is required to come to the institute most days, although more flexible arrangements such as home office and part-time work can be agreed upon if needed.

Further, the RA will be fully integrated within the group of PhD students at CREST with the possibility to participate in weekly research seminars and take classes of the PhD program (conditional on the approval of his/her supervisor). The position is ideal for Master students wishing to gather research experience before starting a PhD. In particular, previous RAs have gone on to pursue their doctoral studies at CREST or within competitive PhD programs abroad.

#### *What we are looking for*

- Master’s degree candidate in economics, statistics or related discipline;
- Long-term interest in economic research;
- Experience working with large (administrative) data sets is an asset;
- Proficiency in Stata and Python (required), and the ability to use other statistical software packages (e.g. SAS, R, Matlab) is strongly preferred;
- Coursework in econometrics, labor economics and international trade is not necessarily required, but would be strongly preferred;
- Excellent oral and written communication skills in English – French is not necessary.

#### *Application*

If you are interested, please apply online by sending the following documents to [gautier.lenfant@ensae.fr](mailto:gautier.lenfant@ensae.fr) until Friday May 13, 2022:

- Short description of your interest in and qualifications for the position
- CV
- Transcripts (unofficial) of your Master’s degree

For further information, you may also address questions about the position to [gautier.lenfant@ensae.fr](mailto:gautier.lenfant@ensae.fr).