

# Research Software Engineer for Economic Modeling

The [Dynare](#) project at [CEPREMAP](#) is hiring a research software engineer.

Dynare is a leading economic modeling software that can handle a wide class of economic models, in particular dynamic stochastic general equilibrium (DSGE) models. Dynare is widely used in the academic world for research and teaching purposes, and in various public and private bodies for performing policy analysis exercises and as a support tool for forecasting exercises.

The offered job consists in:

- designing algorithms, or adapting existing ones, for solving a wide array of problems that arise when solving or estimating economic models
- writing the software implementation of these algorithms
- fixing software bugs
- interacting with users on the various user support channels
- giving training sessions at the annual Dynare Summer School (and possibly during other events)

The ideal candidate would have skills in the following fields:

- macroeconomic modeling (in particular DSGE models)
- econometrics (in particular time series and Bayesian techniques)
- applied mathematics (especially numerical linear algebra)
- computer science (basic algorithmics)
- computer programming

Experience in all these fields is not a strict requirement, but the candidate is expected to display strong abilities to learn autonomously in the areas where he/she lacks knowledge.

Since Dynare is written in MATLAB, Octave, C++ and Julia, some experience with at least one of these programming languages (or with another scientific programming language, such as Fortran, Python or R) is a requirement. A familiarity with Git (the distributed version-control system) is an asset, since that technology is used for managing the source code of Dynare.

Holding a PhD in economics, computer science or applied mathematics is an asset but is not required.

Depending on the candidate's profile, a given percentage of the work time could be dedicated to the pursuit of his/her personal research projects.

The job is based in Paris, France. The CEPREMAP premises are on the same campus as [École Normale Supérieure](#) (campus Jourdan) and [Paris School of Economics](#), which provide a stimulating intellectual environment, with many world-class researchers in economics on-site and the possibility of attending several research seminars in economics.

Knowledge of French is not a requirement.

The position is a fixed-term one year contract, starting in fall 2019. It may be renewed or converted into a permanent position, depending on the direction taken by the project.

Salary depends on qualification and experience.

Applications, with a resume, an example computer program and possibly a research paper, should be sent to: [recruitment@dynare.org](mailto:recruitment@dynare.org)