Job Title: Research Professional  
Location: Chicago, IL  
Full-time or Part-time: Full-Time  
Status of employee: Staff  
Terms: 1 year  
Reporting to: Greg Kaplan and Simon Mongey  
Expected Start Date: 7/1/2019

Job Summary:

The Becker Friedman Institute for Economics (BFI) is seeking to hire a Research Professional to work on new and ongoing research projects which span macroeconomics, labor economics and applied microeconomics, with a focus on the distributional consequences of economic policies and economic forces. The Research Professional will work under the guidance of Professors Greg Kaplan and Simon Mongey. They seek a highly skilled and independently motivated research scholar to work for a period of one- or two-years. The research includes the topics of inequality, risk sharing, unemployment, household formation, migration, fiscal policy and monetary policy. The position will demand close collaboration on a number of new and ongoing projects.

Responsibilities:

- Develop code that implements numerical algorithms to solve heterogenous agent, incomplete markets economies in discrete and continuous time including HANK (Heterogeneous Agent New Keynesian) models. Coding will be done in Matlab, Fortran or Julia; methods for discrete time models will include Euler equation methods, endogenous grid point methods and value function iteration; and methods for continuous time will include application of finite difference methods with upwinding to find viscosity solutions of Hamilton-Jacobi Bellman equations. Also, implements large-scale linearization and model reduction techniques based on Krylov subspace methods and Arnoldi Iteration (20%).
- Develop code to analyze large micro data sets including the Kilts-Nielsen Retail Scanner Dataset, the Current Population Survey, the Panel Study of Income dynamics as well as several proprietary datasets and large administrative datasets. Coding will be done in Stata, R or equivalent statistical package (20%).
- Develop code to estimate random parameter and random utility discrete choice models from experimental data. Models include behavioral phenomena such as ambiguity aversion, probability weighting, loss aversion, endowment effects and hyperbolic discounting familiarity with these concepts required (20%).
- Write and implement advanced programs to solve economic problems that include designing, implementing, testing, and comparing algorithms and models; utilize statistical packages to build large scale database that is efficient for computing; and utilize statistical
packages to visualize complicated research results into nice format for publications and presentations (20%).
- Conduct independent problem-solving with high-level directional advice (5%).
- Test new computing tools to explore better options for computational research (5%).
- Be fully informed on the latest developments in the relevant research areas; present findings effectively and articulately (5%).
- Assist faculty to identity, assess and organize information addressing research goals (5%).

Competencies:

- The ideal candidate will have exceptionally strong computer programming and quantitative skills, experience with a statistical programming language such as Stata, R, or equivalent and familiarity with programming languages such as Fortran, Matlab, Julia, C or Python with interest in coding and a willingness to learn new programs and methods of analysis.
- Knowledge in relevant scientific field required.
- Knowledge of research techniques or methods required.
- Analytical skills required.
- Problem-solving skills required.
- Attention to detail required.
- Verbal and written communication skills required.
- Ability to work independently and as part of a team required.

Education:

- Bachelor's degree in economics, computer science, mathematics or related field required.
- Advanced degree in economics strongly preferred.

Experience:

- The candidate's expertise must be in statistical and economic modeling, programming and the analysis of very large data sets.
- Minimum two years of active research assistance in this area required.
- The candidate is welcome to take advantage of immersion in the Chicago Economics community and to attend student and faculty research workshops.

Required Documents:

- Cover Letter
- CV

About the Unit:

The Becker Friedman Institute for Economics (BFI) works with the Chicago Economics community to turn its evidence-based research into real-world impact. BFI takes a unique approach to bridging the divide between academic researchers and decision-makers in the business community and government by translating and packaging the rigorous work of the Chicago Economics community into accessible formats, and proactively sharing those findings with relevant decision-makers and thought leaders around the globe. BFI is a collaborative platform serving the University of Chicago
Booth School of Business, the Kenneth C. Griffin Department of Economics, the Harris School of Public Policy, and the Law School. For more information visit https://bfi.uchicago.edu

Pay Range: Depends on Qualifications

Scheduled Weekly Hours: 37.5.

To apply to this job, please go to the University of Chicago website and apply to job requisition JR03510.

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Staff Job seekers in need of a reasonable accommodation to complete the application process should call 773-702-5800 or submit a request via Applicant Inquiry Form.

The University of Chicago’s Annual Security & Fire Safety Report (Report) provides information about University offices and programs that provide safety support, crime and fire statistics, emergency response and communications plans, and other policies and information. The Report can be accessed online at: http://securityreport.uchicago.edu. Paper copies of the Report are available, upon request, from the University of Chicago Police Department, 850 E. 61st Street, Chicago, IL 60637.