The Open Source Economics Laboratory (OSE Lab) at the University of Chicago is excited to announce that we are now accepting applications for the 2019 OSE Lab six-week summer boot camp in computational economics, July 1 to August 9, 2019, at the University of Chicago. This is our third year supporting the boot camp, and the OSE Lab has funding for 25 student positions. Students can get more information and submit an application from the following page. The application deadline is Mar. 15, 2019.

https://www.oselab.org/bootcamp/2019

Each admitted OSE Lab student will receive a $4,000 stipend, lodging, and airfare to and from Chicago. Admissions are competitive, and we welcome applications from advanced undergraduate students, masters students, and PhD students. All students will also get to participate in the Econometric Society’s Dynamic Structural Economics Workshop and Conference, July 8-14, at the University of Chicago.

Prerequisites for participating in the camp are multivariable calculus, linear algebra, real analysis, calculus based microeconomic theory (constrained optimization with Lagrange multipliers), and some computer programming experience (e.g., Python, R, C++, Fortran, Java) or software languages (e.g, MATLAB, STATA). Most of the programming in the Boot Camp will be in Python.

Leadership and Instructors
This year's camp is organized by Richard Evans (University of Chicago) and Simon Scheidegger (HEC Lausanne). Other OSE Lab instructors at this summer's boot camp include Lars Hansen (University of Chicago), Anthony Smith, Jr. (Yale University), John Rust (Georgetown University), and Felix Kuble (University of Zurich).

Curriculum
The economics portion of this year's curriculum will include continuous and discrete choice dynamic programming, structural estimation, numerical integration and derivatives, dynamic games, and machine learning.

The numerical methods curriculum will include numerical derivatives and numerical integrals, matrix decomposition (SVD, eigenvalues-eigenvectors, QR-LU), unconstrained and constrained numerical optimization (root finders and minimization), dimension reduction.

The computational curriculum will include object oriented programming, unit testing, Git and GitHub collaboration workflows, visualization techniques, and two weeks of training in high performance computing and parallel programming using the University of Chicago's Midway supercomputing cluster.


Contact and Questions
We hope that many excellent students apply. Additional details on the boot camp and program are available on the OSE Lab website (https://www.oselab.org). Feel free to send any questions to Richard Evans (rwevans@uchicago.edu) or Simon Scheidegger (simon.scheidegger@unil.ch).