Environmental Data Science Bootcamps
Sept. 2019

For graduate students and postdocs in the Physical, Biological, and Social sciences

These bootcamps introduce computational and statistical tools relevant to research in the environmental sciences, and to give new PhD students a jumpstart into the practical skills needed for conducting research. Lessons are applicable to a wide range of fields but examples will be drawn from environmental sciences. To enroll, fill out form at **https://tinyurl.com/EDSbootcamp**

Computing for Research I-IV
Sept. 3-27, Searle 240a, 9:00-12:00
I. Computing at scale: command line interfaces, batch jobs, data files and data structures, repositories (Git), basics of spatiotemporal data
II. Data science and big data: tips and tricks, advanced plotting techniques
III. Interpreting data: regressions, model selection, classification and clustering.
IV. Introduction to deep learning

Data science base camp
Sept. 16-27, Searle 219, 1:30-4:30
Drop-in advice & discussion with senior PhD students

Introduction to Scientific Programming
Sept. 3-13, Searle 240b, 9:00-12:00
Programming in Python, reading in data, plotting and data science basics, working with the Research Computing Center

Topics in Statistics for Research
(with hands-on practice)
Sept. 3-13, Searle 240b, 1:30-4:30
For example: noise and error, autoregressive models, regression basics, interpolation, Gaussian processes and krieging, resampling and Monte Carlo methods