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

**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

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

**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 kriging, resampling and Monte Carlo methods

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