

ENVIRONMENTAL DATA SCIENCE VIRTUAL BOOTCAMPS 2020

These bootcamps introduce computational and statistical tools relevant to research, and are intended to give PhD students a jumpstart into the practical skills needed for research. The 1- and 2-week courses are hosted and organized by our current program fellows. Lessons are applicable to a wide range of fields, but examples will be drawn from environmental sciences. The bootcamps are intended primarily for PhD and academic MS students, but we will accommodate everyone that we can.

To request a spot in one or more courses, please complete the following survey before August 17th:
tinyurl.com/EDSbootcamp20

INTRODUCTION TO SCIENTIFIC PROGRAMMING

Aug 31 - Sep 11, 10:30 am - 12:30 pm CT

For students new to programming, a crash course in the basics to get you up to speed: variables, arrays, list, for loops, if statements, and functions, and how to work with NumPy, Pandas, and Matplotlib for basic data sciences purposes in Python.

COMPUTING FOR RESEARCH

Aug 31 - Sep 11, 10:30 am - 12:30 pm CT

For those ready for more advanced data science: data structures, DASK dataframes and datasets, basics of spatiotemporal data, big data tips and tricks, version control software (Git), advanced plotting techniques, and statistical analyses in Python.

STATISTICS FOR RESEARCH

Sep 14 - Sep 18, 10:30 am - 12:30 pm CT

This course provides an introduction to some of the basic statistical techniques used in environmental research, including linear and logistic regression, stationarity, autoregressive models, and model inference, and will touch on more extended topics. The focus is on practical applications with coded examples of these techniques. Accessible to students familiar with either R or Python.

LIFE DURING GRAD SCHOOL

Aug 31 - Sep 4, 7:00 pm - 8:00 pm CT

Starting grad school is always a big leap, and 2020 is an especially rough year. This week-long series of 1-hr discussions aims to help incoming PhD students make the transition. We will cover themes like: what is graduate school anyway?, navigating the advisor-student relationship, differences across fields, building your professional career, and supporting yourself: building communities across campus, mental health, and working effectively.