

Community Spotlight

Each <u>Community Spotlight</u> features an outstanding group, partner, resource, or member of our community.

Earth Analytics in Python Course

By Leah Wasser, Jenny Palomino, Chris Holdgraf



Module Description:

Earth analytics is an intermediate, multidisciplinary course that addresses major questions in Earth science and teaches students to use the analytical tools necessary to undertake exploration of heterogeneous scientific data.

Throughout the course, students use computationally intensive techniques to address scientific questions. Students will use a suite of different types of publicly available data including:

- Satellite and airborne lidar and spectral remote sensing data,
- Data collected using distributed in situ (on the ground) sensor networks
- · Social media data, and
- Basic demographic data.

Teaching Setting:

This course is designed for students looking to start or advance a career in computationally-intensive earth sciences. Online and in person sections of this course are offered each spring semester as part of the <u>Earth Data Analytics</u> <u>Professional Certificate</u>, a graduate certificate program through <u>Earth Lab</u> at the University of Colorado, Boulder.

Citation:

Wasser, Leah, Palomino, Jenny, & Holdgraf, Chris. (2019, October 30). earthlab/earth-analytics-python-course: Version-1.0.1 (Version 1.0.1). Zenodo. http://doi.org/10.5281/zenodo.3523193



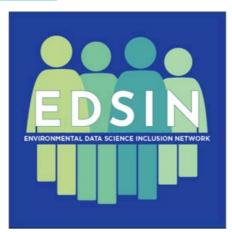
Related Materials and Opportunities:



This week's featured resource was developed by the <u>Earth Analytics Education</u> Initiative, which is part of Earth Lab at the CIRES Institute at the University of Colorado, Boulder. <u>Earth Lab</u> is a synthesis center that capitalizes on the data deluge from space and other platforms to accelerate science, reduce environmental risk, and train a new generation of earth data scientists. The Earth Lab Earth Analytics Education Initiative provides undergraduate, graduate, and professional students as well as online learners around the globe with core in-demand technical skills at the intersection of earth and environmental science and data science. All work is guided by a commitment to open and reproducible science, open education and expanding the reach of earth data science education to students across varying academic, professional, socio-economic and geographic dimensions.



The Earth Analytics Education Initiative has developed open course textbooks, courses and tutorials that teach in-demand earth and environmental data science skills and can be found <u>earthdatascience.org</u> or the <u>Earth Lab site on</u> <u>QUBES</u>. Additionally, they offer an <u>Earth Data Analytics - Foundations</u> professional graduate certificate, consisting of 3 University of Colorado, Boulder courses that can be completed online or in person. <u>Learn about more ways to</u> <u>get involved with the Earth Analytics Education Initiative here</u> and follow Earth Lab on twitter <u>@EarthLabCU</u>.



Earth Lab was also one of several <u>network contributors</u> behind "<u>Bringing</u> <u>Conversations on Diversity, Equity, and Inclusion in Data Science to the</u> <u>Environmental Science</u>", a conference held in Boulder, Colorado in April 2019. Read more about this conference in a <u>recent blog post</u> in the National Ecological Observatory Network (NEON) Observatory Blog. <u>Browse conference</u> <u>materials</u> and learn more about the <u>Environmental Data Sciences Inclusion</u> <u>Network (EDSIN)</u>, which coalesced during the conference, on the <u>EDSIN site</u> <u>on QUBES</u> and join in their <u>Sharing Stories social media campaign</u>, which they are launching during <u>2019 SACNAS - The National Diversity in STEM</u> <u>Conference (#SACNAS2019</u>), and follow the <u>#IAmSTEM</u> hashtag on Twitter. QUBES on Social Media



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