

HDR² From Harnessing the Data Revolution to Harvesting the Data Revolution

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Collaborative Research: HDR DSC: Building Capacity in Data Science through Biodiversity, Conservation, and General Education

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The workforce demand for data analysts and data scientists exceeds the current capacity for higher education to produce this skilled workforce. Our overall goal is to develop scalable, portable data science education that can be readily incorporated into existing programs concentrating on STEM with ecology, biodiversity, and conservation. We will do this by creating multiple curricular data science on-ramps for a broad range of students early in their undergraduate training through general education courses and foundational major courses using inclusive and expansive pedagogy techniques more common in liberal arts education. The expected outcomes from these activities are (1) development of reusable data science modules and courses that can be deployed into existing undergraduate general education and major curricula, (2) the ability for a broad range of conservation interested students to access real-world data science training they are passionate about at an early stage of their education, and (3) training and support mechanisms for undergraduate educators who wish to add data science to their curricula. The products of this proposed multi-institutional Data Science Corps program are designed to be generally extensible to other higher educational institutions and majors through open data and open science, providing capacity to rapidly deploy data science training.

Research

Education and Outreach

HDR-Data Science Corp

Data & Cyberinfrastructure

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