Virtual Infrastructure for Data Intensive Analysis (VIDIA)

Enabling teaching and research on data-intensive computing and analysis techniques.

Large datasets can easily grow to a size beyond the analytical capability of common software tools. Undergraduate institutions often lack the computing infrastructure and support personnel needed to allow students and researchers to create, manipulate, and analyze such extremely large datasets. In order to provide the tools necessary for data intensive computing and analysis techniques, SUNY Oneonta has teamed with the Center for Computational Research at the University of Buffalo to establish a collaborative virtual community focusing on data intensive computing education.

Virtual Infrastructure for Data Intensive Analysis (VIDIA) unites SUNY Oneonta and the CCR to support the analysis of large datasets at Primarily Undergraduate Institutions (PUIs). Using the VIDIA platform, SUNY Oneonta has successfully integrated the analysis of large datasets into coursework in Sociology, Political Science and Philosophy.

VIDIA is hosted by the CCR and was made possible through a 2013 SUNY Innovative Instruction Technology Grant (IITG) grant. The VIDIA site is powered by the HUBzero Platform for Scientific Collaboration, originally developed at Purdue University. HUBzero was specifically designed to help a scientific community share resources. Users can upload their own content, launch computations, and view results with an ordinary web browser, without having to download, compile, or install any code. The tools they access are not just web forms, but powerful graphical tools that support visualization and comparison of results.

- See more at: http://www.buffalo.edu/ccr

Software to Capture and Curate Data

Data sets can be easily moved from Excel or other formats into this environment directly via WebDav (mapping a drive).

Software to Analyze and Visualize Data

Once loaded, data can be analyzed and visualized using popular tools such as R, Rapid Miner, PSPP, and more.

Support for VIDIA provided by the Center for Computational Research University at Buffalo The State University of New York www.ccr.buffalo.edu

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