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HDR DSC: Collaborative Research: Transforming Data Science Education through a Portable and Sustainable Anthropocentric Data Analytics for Community Enrichment (ADACE) Program

Wednesday 26 October 2022 16:30 (1 hour)

Led by an interdisciplinary team from the University of Tennessee at Chattanooga, Howard University, and Chattanooga State Community College, the proposed Anthropocentric Data Analytics for Community Enrichment (ADACE) program will develop a sustainable education and research platform for human-centric data science, where humans are either considered as the research subjects or regarded as a component of data analytics.

The ADACE program includes the following activities: (1) advancing or innovating the data science curricula of the participating institutions; (2) recruiting undergraduate students in the program; (3) enriching the local communities by organizing a number of open seminars, workshops, or hackathons; and (4) developing cooperative community projects with the local business and research institutions. These community projects focus on topics pertaining to anthropocentric data science, such as seamless human-machine interaction, interpretable neural networks, human-in-the-loop machine learning, social networks, and AI ethics, etc.

Participating institutions will take advantage of their connections to for-profit and nonprofit businesses in the area to expose students to practical data science issues and offer networking opportunities. Through this proposed program, students will acquire systematic data science knowledge, problem-solving abilities, practical experience, and rigorous research training. All curricular materials will be designed to be portable, sustainable, and easily disseminated to ensure their expanded impact. They are being evaluated for measurable outcomes and tailored to include non-traditional students, who form a large portion of the potential data science workforce in the regions surrounding the participating institutions.

Research

Education and Outreach

Data & Cyberinfrastructure

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