Title: Reinventing Computing Education for the Converged HPC and Data Driven World

Abstract
The rapid convergence of the HPC and data intensive/AI driven methodologies for addressing complex problems has created new challenges in both traditional graduate education and a tremendous demand for training in newly in demand skills for practicing professionals. Such training has to be skills oriented and well grounded in theory and complementary to the students' backgrounds -- data sciences for computing and engineering students and high end computing for statisticians and other data scientists. We present here new approaches to meeting all these demands.

Bio
Abani Patra is a Computational and Data Scientist and directs the newly constituted Institute for Computing and Data Sciences and University at Buffalo, SUNY at Buffalo, NY. He has a PhD in Computational and Applied Mathematics from the University of Texas-Austin. He has published over 100 peer reviewed articles and conference papers and is a Fellow of the US Association for Computational Mechanics. He has also directed programs at both the National Science Foundation and Department of Energy Office of Advanced Scientific Computing Research.