

Building a Data Science Community through No-Boundary Thinking

Joan Peckham, University of Rhode Island

The NSF TRIPODS community has an interesting goal: to begin to develop the “theoretical foundations of data science through integrated research and training.” While this program is focused on the core disciplines of computer science, mathematics and statistics, a robust data science research agenda necessarily includes much more. Data science scholars need to work together across the three core disciplines, be informed by other domains that drive data science, translate essential theoretical results, and execute broader impacts through, formal education, informal training, or attention to ethical implications. No-boundary Thinking (NBT) approaches will be needed for all of these aspects. NBT, in which teams possessing diverse perspectives work together to solve problems, requires special considerations for team building and communication. The NSF funded NBT community that arose from a Northeast EPSCoR meeting in 2013 has put effort into solving potential barriers and providing possible solutions for NB engagement in research and education. In this talk we will explore how the TRIPODS community might help scholars and students to move from the usual disciplinary silos through transdisciplinary engagement to genuine No-boundary problem definition, solution and translation.