Joe Skufca\* (jskufca@clarkson.edu), 8 Clarkson Ave, Potsdam, NY 13699. Ecosystem Development: Supporting new programs for the next generation of applied mathematician.

The science of data has emerged as a novel new tool, with clear implications for the future of quantitative methods in business, industry, and government. The growth of this science has been rapid, disruptive, and with full appreciation that the set of underlying main concepts, skills, and ethics are not well developed. To produce the next generation of tool users and tool developers in the quantities required to meet the need necessitates new infrastructure to support that preparation.

For many institutions, making the transition from traditional math programs to these new programs seems like a major undertaking. In this talk, we describe such problems might be constructed from existing faculty capacities through innovative, interdisciplinary cooperation. We describe (as case study) the implementation of a Data Analytics Master's Program and a Data Science Undergraduate program using the framework of existing coursework and faculty.

We attempt to provide a template that can allow other universities to answer... "how could we do that here." (Received September 17, 2019)