Research Objectives and the DSI Fellowship   --Mark Rucker--

My personal research focuses on how cyber technologies, with the ability to learn, can work more productively with people. In particular, I'm working on a number of projects that seek to quantify human objectives within a Reinforcement Learning framework. The goal is to create cyber agents which can work cooperatively with human agents. As such, our project proposal supports my research in two ways: one, a deeper understanding of how human agents and cyber agents can work together and two, a broader understanding of the ethical quandaries that surround such relationships.

Along with research objectives this project also supports my career goals. With six years of experience in technology startups, I came back to school to learn about the latest research in assistive agents. I will complete my MS in 2018 and have plans to start my own socially driven startup to address poverty issues. This project would provide invaluable insight into a new industry that is sure to face many ethical dilemmas as it grows. In a startup, picking the correct direction out of the gate can often be the difference between success and failure. Even larger and more established startups, like Uber, can still struggle if they do not take their ethical responsibilities seriously.