Katie Byl, Assistant Professor in the Department of Electrical and Computer Engineering Receives NSF Early Career Award



Assistant Professor Katie Byl received the National Science Foundation (NSF) Early Career Award and \$400,000, for her project, "Robust Bipedal Locomotion in Real-World Environments," which aspires to develop tools for analyzing and optimizing quasi-periodic biped gaits for high-dimensional models of both humans and humanoid devices. If successful, the work has applications such as evaluating the risk of falling for a stroke survivor who walks with an impaired gait, to the design of smart lower-limb prostheses for injured veterans. Byl's project also has an outreach component, including field trips and a campus Robotics Club, to encourage youth interest in the STEM (science, technology, engineering, and mathematics) disciplines.

The Faculty Early Career Development (CAREER) Program offers the NSF's most prestigious awards in support of the early career development of teacher-scholars deemed most likely to become the academic leaders of the 21st century. The awards provide a financial stipend to support research activity for a period of five years.

According to the NSF, CAREER awardees are selected on the basis of creative proposals that effectively integrate research and education within the context of the mission of their organization. The plans are expected to build a firm foundation for a lifetime of integrated contributions to research and education.