

### Overview

The increasing vulnerability to data theft caused by digitalization and cyber attacks has created a need for a workforce that has the knowledge, skills, and experience to handle cyber threats. The Cyber Resilience Institute (CRI) is a 501(c)(3) non-profit organization that works both nationally and internationally within the intersection of the sports industry, education, and the field of cyber security. The CRI seeks to assist communities and organizations with organizing cyber resilience and program development as well as bring Information Sharing Analysis Organizations (ISAO) together in the sports industry. The Cyber Resilience Institute plans to accomplish its goals through two separate, but interconnected programs, which are c-Watch and CrowdWatch. These programs provide students with a foundational knowledge in cyber security and help students understand the technical, operational, and legal elements of cyber threat analysis. If this proposal was funded, the CRI would be able to perform more research on cyber threats and could develop stronger security tools and methods in order to detect and prevent these threats as well as provide more students with access to this training. To broaden access of Cyber Infrastructure (CI), the CRI seeks to increase community outreach by establishing relationships with Universities and assisting with the development of CrowdWatch clubs on University campuses. In order to broaden CI adoption, the CRI seeks to both build excitement and passion of sports and to generate interest and activity around cyber intelligence and information sharing. There are a wide range of the amount of students that attend a typical c-Watch training program ranging from 12-70. The CRI focuses on cyber security, threat analysis, cyber resilience, cyber infrastructure, and workforce development. The names of the Cognizant program Officers consulted prior to submission of this proposal are Sushil K. Prasad and Victor P. Piotrowski.

### Intellectual Merit

The Cyber Resilience Institute has two main goals with its c-Watch and CrowdWatch programs: advance the knowledge of students and advance the knowledge in the field of cyber security. To advance the knowledge of students, the CRI seeks to develop a modern workforce that is more competent in the field of cyber security by providing them with the tools, knowledge, and experience to deal with cyber-attacks. In order to advance the knowledge in the field of cyber security, the CRI seeks to build a strong defense network of individuals that discover and analyze cyber threats. This research will then be used to gain insights into new methods, knowledge, and technology to defend cyber-attacks.

### Broader Impacts

The CRI's programs will help protect society from cyber threats. One way these programs will do this will be the protection of personal data/information from cyber thieves. Another impact that these programs will have is the protection critical infrastructure. The c-Watch and CrowdWatch programs' contribution to desired societal outcomes seek to prevent cyber threats from happening as quick as possible.