**Facilities, Equipment and Resources at Stony Brook University**

Research activities related to this project will be conducted in the current Department of Computer Science building, the recently established National Security Institute at Stony Brook University (SBU) and the Center of Excellence in Wireless and Information Technology (CEWIT) facility at Stony Brook SBU.

**Computer Science Department**

The computational needs of the proposed research activities will be easily be met with existing and anticipated computing facilities and laboratories. The Department of Computer Science’s primary facilities are located in the Computer Science Building, which has more than 20,000 square feet of lab space. All of the research laboratories are interconnected on a 2.6Gbps Ethernet backbone, individual systems have 100/1000Mbps connections and the department has a 100Mbps full-duplex connection to the campus backbone. Stony Brook University has dual 900Mbps connections to the Internet and a 155Mbps connection to Internet II. Additionally, the department maintains its own 802.11n wireless infrastructure providing connectivity throughout the Computer Science building. The general department computing facilities contain over 250 computer systems including a variety of compute servers, laptops and workstations running many popular operating systems. There is plenty of general data storage, a departmental web server and numerous printing facilities available. Additionally, a new 70,000 sq ft Computer Science building will open in November 2014 and includes at least 27,000 sq ft of research space in 14 research labs, each containing the latest equipment to facilitate storage and data sharing.

**Center of Excellence in Wireless and Information Technology (CEWIT)**

**Center of Excellence in Wireless and Information Technologies (CEWIT).** Space and computing resources are available to computer science faculty and students in the Center of Excellence in Wireless and Information Technology (CEWIT), a $250 million dollar government / industry / academic partnership awarded to Stony Brook University by the State of New York in 2001. CEWIT has 100,000 square feet of lab and incubator space at a new building that just opened in September 2008, and continues to occupy 15,000 square feet of active R&D lab space on the main campus. To help kick-start the center's research, the State of New York awarded $900,000 in startup equipment funds to the CS department. The CEWIT cluster includes 300 Dell PowerEdge 1800, 1425 and 2850 systems with 450 CPUs total, 1-4GB ram in each system and a total of 100TB of storage. In addition, there are three HP Proliant 585 parallel systems with 32-64GB ram in each system to support large-memory computing and simulations. All of the CEWIT systems are interconnected on a 10Gbs backbone with a 1Gbs connection to each system and use ROCKS cluster software.