July 27, 2015

Graduate Assistant and Waged Undergraduate Positions

The Virginia Tech Smart Infrastructure Laboratory (VTSIL) has instrumented Goodwin Hall with over 200 accelerometers and sensors to study the dynamic response of the building in real-time with associated applications for the development of smart infrastructure. This test bed enables us to study a myriad of topics associated with building design and operation from the building's infancy through its useful life. This work impacts a variety of topics including structural dynamics, structural health monitoring, localization and tracking of occupants, energy management, emergency evacuation, signal processing, and data management. You can see more about our work at our website: http://www.me.vt.edu/vtsil.

We are currently looking for a highly motivated undergraduate and/or graduate student to help us with this endeavor. We are looking for someone to help us develop code for collecting and processing data from our data acquisition network. This is an opportunity to work with cutting edge data acquisition systems and a unique test bed, gain valuable experience with real-world data collection and data management, and collaborate with a multidisciplinary team of students and professors.

The goal of the position will be to develop a GUI that simplifies the use of an existing C++ code, which is designed to acquire data from a distributed data acquisition system throughout Goodwin Hall. The simplification of the developed code is imperative for the sharing of building data with the external research community.

Experience programming in C++ is required. Experience with data acquisition, instrumentation, Qt and MATLAB is desired.

The expected duration of these positions is on-going and research credit could be offered if appropriate. The undergraduate student position may also be compensated with hourly wage, and successful graduate candidate will be offered a Graduate Assistantship for 2015 Fall semester which also includes a tuition waiver. Graduate Assistantship (GA) eligibility is determined by the Graduate school (graduateschool.vt.edu/financial/assistantships).

If interested, please e-mail Dr. Tarazaga at pt@vt.edu or Dr. Xie at zhiwuxie@vt.edu.

Sincerely,