

# NSIC 2009 Application to Compete

This form will be completed and submitted (electronically or by fax) by January 28, 2009. It must be totally completed to be considered.

**University:** Colorado School of Mines  
1500 Illinois St  
Golden, CO, 80401

**Technology Title:** Activity Recognition in a dense sensor network

**Technology Description** (limit to one paragraph):

Using wireless sensor networks as an information source, we propose an approach to perform real-time activity classification and anomaly detection within a building. Our primary target is publicly available buildings where conventional security methods are not possible. Our goal is to produce work which leads to faster response times in the event of security or health risks that need immediate attention.

**Team Composition and Contributions to the Team:**

Student Team Leader

James Howard      [james.w.howard@gmail.com](mailto:james.w.howard@gmail.com)      303-881-9826  
Contribution: Development, implementation and testing of possible algorithms.

Faculty Advisor

Dr. William Hoff      [whoff@mines.edu](mailto:whoff@mines.edu)      303-273-3761  
Contribution: Development of algorithms, lead on all project related decisions

**Certification:**

On behalf of our team we certify that our entry is the original idea and work product of this student/advisor team, and has not been (1) made available to the public as a commercial product or process or (2) patented or published more than one year prior to the date of submission to the competition. The technology is not licensed to any business. If the technology is a continuation of previous research at the University, the current team of students and advisor has contributed significant advances in the technology. This technology has not previously been the winner of one of the top three awards at a previous NSIC competition.

James Howard



Team Captain  
Date: 02/02/2009

Team Faculty Advisor  
02/02/2009