BROWN BAG SEMINAR

SPEAKER: **Karl Castleton**
Assistant Professor of Computer Science, CMU

TITLE: **Re-purposing Automotive Technology for Safety**

WHEN: **Friday, Feb. 13, 2015 at noon**

WHERE: **WS 131**

ABSTRACT: Today many small inexpensive embedded linux computer systems are available, such as the Raspberry Pi, Beaglebone, and Mr. Castleton's favorite, a PCDuino3. Cars have more technology in them than ever before, and those technologies are durable and well tested. But can those technologies be used to help keep people safe when they are not in the vehicle? What techniques and technology are used to communicate with such devices? How do you read a data sheet for a computer chip so you can make use of the device?

Mr. Castleton will present a recent project that included efforts by students, where Radar systems from cars are used to protect people moving around trains in the Washington DC Metro subway system. Video demonstrations of CAN being used to drive an ATV and actual product demonstration videos of the Train Movement Alarm (TMA) system will be shown.