



WEARABLES

DESIGN EXHIBIT

Monday July 28, 2014

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Sedra Student Design Centre
E5 building, 1st floor
University of Waterloo
12:30 pm to 3:30 pm

<http://www.information.uwaterloo.ca/howto-reach.html>

Systems Design Engineering students will exhibit product designs that are based on various sensors: ones that use biological signals, track human motion, track touch sensations and use cameras.

12 student groups in a third-year Systems Design Engineering course will present and demonstrate various product design prototypes. The exhibition runs from 12:30 p.m. until 3:30 p.m. on Monday July 28, 2014 in the Sedra Student Design Centre which is located in building E5, first floor at the UW main campus. The student groups

were each required to select a problem area, identify a design problem objective and solicit needs from stakeholders - all to lay the groundwork for developing innovative concepts that are prototyped for display at the upcoming exhibit.

Designs prototypes that will be demonstrated include:

- a music selector that is based on your mood captured from brain signals,
- another brain signal processor that enhances the environment for optimum meditation,
- capturing body signals that indicate road rage for drivers,
- a wrist band that uses body signals as passwords,
- an intelligent machine shop system that monitors biosignals of operators,
- a bio stress mitigation tool,
- a modified bicycle that has sensors that monitor athlete performance,
- a wearable motion capture system for physiotherapy feedback,

- climate tags that can be dropped anywhere for easily monitoring complex environments,
- a physically embodied gaming locator system,
- a wearable pressure system for martial art training and
- an intelligent fridge food monitoring system.

Additional information can be made available by contacting the course instructor Prof. John Zelek at jzelek@uwaterloo.ca (or tel: 519.888.4567 ext. 32567).