

*Transient Oto-Acoustic Emission Testing using Exotic Speech Sounds (EE 1898)*

Project Supervisors: Drs. Bob Boston and John Durrant  
**Kenneth D Morton**

*Wireless Energy Harvesting Using Modified Crystal Radio Set (EE 1896)*

Project Supervisor: Dr. Marlin Mickle  
**Christine D Barger**  
**Brandi V Golimowski**  
**David T Pravlik**

*VLSI LDPC Bit Node Design (EE/COE 1193/2193)*

Project Supervisor: Dr. Ivan Kourtev  
**Peter J Crist**  
**Peter J Hawrylak**  
**Christopher H Hurley**  
**Derek R Sorg**  
**Kurt M VanRyzin**

## Cooperative Education

*Life Cycle Engineering at Medrad*  
Medrad, Inc.  
**Matthew D Bohn**

*Co-op*  
ANSYS, Inc.  
**Garret Clarke**

*Broad Street Subway Signal System Upgrade*  
Union Switch and Signal  
**Jonathan Comstock**

*Development Services Co-Op Experience with ANSYS*  
ANSYS, Inc.  
**Gabrielle H Eckenroad**

*Software Engineering at Westinghouse*  
Westinghouse Electric Company  
**Ronald R. Falise**

*My COOP at the NSA*  
National Security Agency  
**James Huselton**

*Computer Engineering in the Steel Industry*  
AK Steel  
**Beth Zokaites**



UNIVERSITY OF  
PITTSBURGH

*Electrical Engineering*  
*Computer Engineering*

Spring Term 2004  
Senior Design  
Exposition and  
COOP Poster Fair

Friday, April 16, 2004  
1 pm - 3 pm

Third Floor  
Benedum Hall of  
Engineering

\*Not presenting at this expo

Printed on April 13, 2004

## Senior Design and Engineering Projects

*Baseball Bat Warmer (ENGR 1050)*

Project Supervisor: Frank Marx

**Joseph M Hardiman**  
**Courtney D Holzer**  
**Chris Schneider (ME)\***  
**Robert A Washington**

*Blink/Bell's Palsy (ENGR 1050)*

Project Supervisors: Drs. Marlin Mickle and Tonya Stefko, Frank Marx, Doreen Jacob and Dan Harrist

**Maurice G Artis\***  
**Ronald R Falise**  
**Steven A Hackworth\***  
**Kenneth S Pryke**  
**Zakiyyah N Shaheed\***

*Check Node Design of LDPC (EE/COE 1193/ 2193)*

Project Supervisor: Dr. Ivan Kourtev

**Kalpana Jayaraman**  
**Naresh G Menon**  
**Rohit Santhanam**  
**Harshit S Shah**

*Customizing FPGA Simulation Output with Modelism (EE/COE 1896)*

Project Supervisor: Dr. Ray Hoare

**Michael Holodnak**  
**Dulani K McLaurin**

*Cyber Security (EE/COE 1896/1898)*

Project Supervisors: Dr. Marlin Mickle and Carl Taylor

**Charles J Jae\***  
**Steven R. Lucchino\***  
**Lucas F Milliron**  
**Michael A Reb**  
**Ralph S Wangler**

*Cybersecurity with a Fingertip Chip (EE/COE 1896)*

Project Supervisor: Dr. Marlin Mickle

**Mohamed T Dheen**  
**Bryan D Kowalski**  
**Shawn E McVay**  
**Kenneth S Pryke**

*Dial-Up Home Security (EE/COE 1896)*

Project Supervisor: Dr. Steve Jacobs

**James F Kelly**  
**Robert D Oswald**  
**Jeffrey C Pasternak Jr.**  
**Eli J Wasserman**

*Distributive File System (COE 1898)*

Project Supervisor: Dr. Ray Hoare

**Ryan C Barney**  
**Andrew J Dreistadt**  
**James M Geisler**  
**Matthew R Hicks**  
**Adam A Shash**  
**Joseph G St.Onge**

*Embedded Control for a Static Walking Bipedal Robot (COE 1898)*

Project Supervisor: Dr. Steve Jacobs

**Mark J Smorul**

*Embedded RFID Instrument Tracking (ENGR 1050)*

Project Supervisor: Dr. Marlin Mickle and Dan Harrist

**Gabrielle H Eckenroad**  
**Brandon M Gromis**  
**Vaibhav Laroia**  
**Manpreet S Mann**  
**Chas Suter (ME)\***

*OS3 Report Generation Using .Net Technology (COE 1898)*

Project Supervisor: Dr. Ray Hoare and Dara Kusic

**John Hancock**

*Improved Security Practices in 802.1x Authentication (COE 1898)*

Project Supervisor: Dr. Jose Brustoloni

**Corey C Grone**

*LDPC Decoder Architecture Team (EE/COE 1193/2193)*

Project Supervisor: Dr. Ivan Kourtev

**Joshua D Fazekas**  
**James A Larkby-Lahet**  
**Brandon D Marzec**  
**Michael D Niesslein**  
**Nicholas M Stabinsky**

*Medical Instrument with RFID Technology*

(COE 1896/1898)

Project Supervisor: Dr. Marlin Mickle and Frank Marx

**Brad R Diggans**  
**George Lucas**  
**Bryan M Luizer**  
**Matt Bowman\***  
**Jessica L Patla**  
**Michael S Smith**  
**NhuAn T Vu**

*Motion Sensing MIDI Control Device (EE 1898)*

Project Supervisor: Dr. Steve Jacobs

**Jeffrey W Schuster**

*mPANTHER: DSP/LUT Hardward Power Consumption (COE 1896)*

Project Supervisor: Dr. Alex Jones

**Anthony P Campbell**  
**Daniel J Catinella**  
**Mark D Schlegel**  
**Zachary S Stoian**

*Optimizing Snort's Performance (COE 1896)*

Project Supervisor: Dr. Raymond Hoare

**Ludmila Doroshkevich**  
**Ronald R Falise**  
**Yuri T Merrick**

*Paint Savor Project (ENGR 1050)*

Project Supervisor: Frank Marx

**Dan Bliss (CE)\***  
**Mark Campbell (ME)\***  
**Brett J Massimino**  
**Eric A Vitale**

*Planar Inductor Design (EE 1896)*

Project Supervisor: Dr. Marlin Mickle

**William M McFadden**  
**Samuel L Riffer II**

*The Smart Stretcher (ENGR 1050, EE 1896)*

Project Supervisors: Dr. Bopaya Bidanda and Frank Marx

**Joe Berger (ME)\***  
**Chin Kampanatsanyakorn**  
**James L Leister**  
**Phil Lucas (ME)\***  
**Shawn Zier (ME)\***