

## Cooperative Education

*Co-op at ArgonST*  
ArgonST  
**Dave Crist**

*Co-op at Westinghouse Nuclear Fuels Division*  
Westinghouse Electric Company  
**Justin Fiore**

*Electrical Engineering in a Manufacturing Plant*  
General Electric, Lighting  
**Chris Kudrick**

*Advanced Integration Group*  
Advanced Integration Group  
**Anthony LoGreco**

*Co-op at ArgonST*  
ArgonST  
**Justin Panuski**

*Ansys*  
Ansys, Inc.  
**Kyle Patel**

*Computer Engineering in the Defense Industry*  
ArgonST  
**Benjamin Pease**

*Ansys*  
Ansys, Inc.  
**John Penberthy**

*Union Swith & Signal Co-op*  
Union Switch & Signal, Inc.  
**Dan Shero**

*Co-op at ArgonST*  
ArgonST  
**Kyle Treleaven**

*US Steel*  
US Steel  
**Greg Wunderley**



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*school of engineering*

**electrical  
& computer  
engineering**

# SENIOR DESIGN EXPOSITION AND COOP POSTER FAIR

**SPRING 2006**

**FRIDAY, APRIL 21, 2006  
1 PM - 3 PM**

**THIRD FLOOR  
BENEDUM HALL OF  
ENGINEERING**

**UNIVERSITY OF  
PITTSBURGH**

## Senior Design and Engineering Projects

### *Acoustic Source Tracker*

Project Supervisor: Bob Boston

**David Corsello**  
**Matt Ferencz**  
**Brian Venus**

### *Autonomous Robotic Localization and Path Planning*

Project Supervisor: Donald Chiarulli

**Andrew Checchi**  
**Justin Fiore**  
**Gerald Stralko**

### *Breast Impedance Device*

Project Supervisor: Frank Marx

**Timothy Bagatti (ME)**  
**Kevin Czajkowski (IE)**  
**Jessica Eakin (ME)**  
**Julie Halter**  
**Robert James (ME)**  
**Brandon Kemp**

### *Cache-Sim*

Project Supervisor: Ahmed Amer

**John Penberthy**

### *Curve Tracer Implemented in LabVIEW*

Project Supervisor: Joel Falk

**Matt Corbin**  
**John Kilcoyne**  
**Mike Neff**

### *Discovering the Encounter Work Flow*

Project Supervisor: Alex Jones

**Curtis Hoover**  
**Shane McManus**

### *A Fast-Cache Model for Dynamically Compiled Simulation*

Project Supervisor: Bruce Childers

**Jeffrey Vance**

### *The FHK System*

Project Supervisor: Steve Jacobs

**Lee Franklin**  
**Craig Halitsky**  
**Nai-Kuei (Nick) Kuo**

### *Finite Element Analysis of Action Potential Generation in the Cortico-Spinal Tract During Transcranial Electrical Stimulation*

Project Supervisors: Robert J. Sclabassi, H. Louis Journee, and Mingui Sun

**Leon Li**  
**William Tyler Rath (BioE)**

### *Gess-Work: A Tournament System for the Game of Gess*

Project Supervisor: Ahmed Amer

**Drake Wilson**

### *Handwriting Recognition Using Neural Networks*

Project Supervisor: Ivan Kourtev

**Ali Alibeji**  
**Sivram Bandhu**  
**Hitesh Tanwani**

### *Hardware Design of Loop Controls for Maximum Speed*

Project Supervisor: Ray Hoare

**Andrew Checchi**  
**Josh Sanders**  
**Greg Wunderley**

### *Helical Waveguides*

Project Supervisor: Kevin Chen

**Patrick Graf**  
**Joe Pasqualichio**

### *High Speed Pass-Over System*

Project Supervisors: Marlin Mickle and Tom Cain

**Vu Nguyen**

### *An Embedded Audio Visualization System*

Project Supervisor: Tom Cain

**Brian Bell**  
**Andrew Voltz**

### *Interactive Radio Station Exhibit*

Project Supervisor: Steve Jacobs

**Chris Church**  
**Mike McElhinny**  
**Mark Perry**  
**Dan Shero**  
**Abbie Shoemaker**  
**Amal Zenati**

### *Motion-Controlled Solution for Controlling Musical Instrument Effects Processors*

Project Supervisor: Steve Jacobs

**Michael Lappano**

### *Neighborhood Information System*

Project Supervisor: John Ramirez

**Mark Vollmer**

### *Optimal Energy Harvesting*

Project Supervisor: Marlin Mickle

**Gary Cookey**  
**Justin Geibel**  
**Jeff Newman**  
**Shane Wherry**

### *Pulse-Step Pro System Suite*

Project Supervisor: Tom Cain

**Brian Juranowitch**  
**Robert Jacobs**

### *W.O.O.T. Wirelessly Operated Optical Transport*

Project Supervisor: Tom Cain

**David Crist**  
**Justin Panuski**  
**Ben Pease**  
**Kyle Treleven**