

# Trudy L. Schwartz

University of Colorado  
429 UCB, Aerospace Engineering Sciences  
Boulder, Colorado 80309-0429  
(303) 735-2986 ph.  
[Trudy.Schwartz@colorado.edu](mailto:Trudy.Schwartz@colorado.edu)

## Personal Statistics

Citizenship – United States

## Education

**MS in Aerospace Engineering**  
University of Colorado, Boulder

**December 1998**

**BS in Mechanical Engineering**  
University of Colorado, Boulder

**December 1995**

## Teaching, Mentoring and Service

**Aerospace Lab Manager, Senior Instructor**

**2005 – present**

*Aerospace Engineering Sciences, University of Colorado, Boulder*

- Instructor for one section of undergraduate/graduate level PIC based embedded systems course: *Microavionics*. (Fall 2016, 2017, 2018, 2019)
- Collaborate with faculty and supervise student staff (Laboratory Assistants) to design, build, teach and conduct laboratory experiments in all Aerospace undergraduate and graduate courses each academic year that have laboratory activities. Share responsibility for ~ 60 lab experiments in the areas of aerodynamics, structures, controls, thermodynamics, vehicle design, materials, electronics, etc.
- Attend and grade half of the senior design project presentations (typically 8 projects). Provide technical advising in the areas of requirements-based design, systems engineering, testing, embedded systems, instrumentation, data acquisition, electronics design and fabrication, etc to all 16 senior teams and 5-7 graduate project teams.
- In general, provide instrumentation and electronics technical support for labs, senior projects, graduate projects and research activities in the department.
- Staff, organize and maintain equipment the AES Electronics and Instrumentation Laboratory that serves students, lab development and general department needs.
- Coordinate the Earn/Learn funding program to support a team Laboratory Assistants and other student apprenticeship positions in the AES department.
- Manage department budget allocation to the support the department's support of current and developing laboratory activities in the courses.

**Aerospace Lab Manager, Senior Professional Research Associate**

**2003-2005**

*Aerospace Engineering Sciences, University of Colorado, Boulder*

- Collaborated with faculty and staff to conduct laboratory experiments in all undergraduate courses.
- Assisted senior design projects and provided instrumentation and electronics technical support.

## Professional Experience

**Module Integration Engineer**

**1997-2003**

*Integrated Teaching and Learning Laboratory (ITLL), University of Colorado, Boulder*

- Provided technical support to faculty, staff and students using the ITLL for experimentation.
- Designed, built, configured and maintained computer data acquisition workbenches using National Instruments hardware and software.
- Maintained and designed laboratory experiments for multiple engineering departments.

## **University of Colorado, Aerospace Engineering Sciences Committees**

- Executive Committee 2018-2019
- Undergraduate Curriculum Committee - Teaching Methodologies Subcommittee Annually
- Instructor Search Committee 2017-2019
- Faculty Advisor for Women of Aeronautics and Astronautics student organization 2017-2019

## **Honors and Awards**

- Outstanding Service Award, Faculty award in the Aerospace Department. 2015

## **Outreach/Service**

- Colorado Aerospace Internship Experience. (Summer annual event.) 2014-2018  
This outreach event for Colorado students every summer to provide 2-day intensive rocket design build experience.
- Science Fair Judge at Jefferson Academy Secondary School, Broomfield. 2015

## **Publications**

Schwartz, T., Dunkin, B. (2000) *Facilitating Interdisciplinary Hands-on Learning using LabVIEW*, Paper published in the International Journal of Engineering Education, 16(3), 218-227.