

Objective To gain the expertise to design and build lightweight composite space structures

Experience

Intern

May 2004 – August 2004 Mobile Aerospace Engineering, Mobile, AL

- Engineering liaison for maintenance and repair of commercial airliners
- Researched Passenger-to-Freighter conversion for Boeing 757-200

Captain and Design Leader

2005 Auburn Lady Tigers SAE Mini Baja Team

- Lead team in designing, building, and racing a rough-terrain off-road vehicle in all three North American competitions
- Presented vehicle technical specifications and marketing, production, and finance for mass production of the vehicle
- Winners of the 2005 Challenge to Women Mini Baja Team Leaders presented by the SAE Women Engineers Committee

Undergraduate Research Assistant

May 2005 – July 2005 Adaptive Aerostructures Laboratory, Aerospace Engineering Department, Auburn University, AL

- Fabricated and tested advanced composites and adaptive aerostructures

Tutor

August 2004 – May 2006 Study Partners, Auburn University, AL

- Tutored Auburn University students in undergraduate math and science classes including algebra, trigonometry, calculus, and physics

Intern

June 2006 – September 2006 Pratt & Whitney, Materials and Processes Engineering, Polymeric Materials Group, East Hartford, CT

- Fabricated composite test specimens and tested samples for mechanical properties
- Cut and polished composite engine hardware for micro structural evaluation

Graduate Research Assistant

September 2006 – Present Mechanical Behavior Laboratory, School of Mechanical, Industrial and Manufacturing Engineering, Oregon State University, OR

- Investigate new methods of fatigue failure prediction in extrinsically toughened materials with an emphasis on Al_2O_3
- Mentor high school students in summer engineering camp aimed at recruiting girls and minorities to science and engineering

Tutor

September 2006 – Present Inspire Tutoring, Corvallis, OR

- Tutor students from area schools in undergraduate math and science classes including algebra, trigonometry, calculus, physics, statics, and mechanics of materials

Education

AUBURN UNIVERSITY Auburn AL

Department of Aerospace Engineering, GPA 3.2

- Bachelor of Aerospace Engineering, May 2006
- Fields of Study: Structures, Composite Materials, Dynamics, Propulsion, Aerodynamics

OREGON STATE UNIVERSITY Corvallis OR

Materials Science Program, GPA 3.5

- Master of Science, June 2008

Skills

Programming: Fortran, Matlab

Computer Tools: SolidEdge, Nastran, Patran

Fabrication: Lathe, Mill, TIG welding

Honors & Organizations

Alpha Lambda Delta National Honor Society

Alabama Space Grant Consortium Scholar, 2004

Auburn Women's Water Polo Club, President 2004-2005

Society of Automotive Engineers

American Institute of Aeronautics and Astronautics

Society of Women Engineers

League of Women Voters

OSU Materials Science Seminar, Coordinator Fall 2008

References

Dr. Charles R. Watson – Pratt & Whitney Fellow, Composite Materials
Pratt & Whitney, 400 Main Street M/S 114-43, East Hartford CT, 860-565-0118, charles.watson@pw.utc.com

Dr. Jamie J. Kruzic – Assistant Professor of Materials Science, Thesis Advisor
Oregon State University, Department of Mechanical Engineering, 204 Rogers Hall, Corvallis OR, 541-737-7027, kruzicj@engr.orst.edu

Dr. Peter Jones – Associate Professor of Mechanical Engineering, War Eagle Motorsports Faculty Advisor
Department of Mechanical Engineering, 270 Ross Hall, Auburn University AL, 334-844-3368, jonespl@eng.auburn.edu

Dr. R. Steven Gross – Associate Professor Aerospace Engineering, Undergraduate Academic Advisor
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Dr. Ron Barrett – Associate Professor of Aerospace Engineering
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