

Daniel Pinero

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SKILLS

- 3 years of experience using SolidWorks
- 1 year experience using COMSOL Multiphysics for microfluidic flow
- 4 years of experience with MATLAB
- 1 year experience in scanning electron microscopy
- 1 year experience with C programming
- 1 year of experience using LabVIEW for data acquisition and control systems
- Expert user of Microsoft Word, Excel, Powerpoint

COURSEWORK

Heat Transfer
Fluid Mechanics
Advanced Thermodynamics

Solid Mechanics
Materials Engineering and Processing
Finite Element Method

Mechatronics
Dynamics Systems and Controls
Thermal-Fluid Systems

EDUCATION

University of Texas at Austin Aug '13 – Present
M.S. in Mechanical Engineering
• *Research Topic: Rapid Deployable Wind Turbine*

University of Texas at Austin Aug '08 – Dec '12
M.S. in Mechanical Engineering
• *Cumulative GPA: 3.88*

WORK EXPERIENCE

University of Texas at Austin, Undergraduate Researcher Aug '12 – Aug '13

- Conducted Limiting Oxygen Index tests on polymer nanocomposites
- Analyzed thermogravimetric data for kinetic properties
- Determined ablative performance of polymers

Goddard Space Flight Center, Engineering and Technology Division Intern June '12 – Aug '12
June '11- Aug '11

- Modeled surface roughness deformation in MATLAB
- Performed experiments to verify simulated flow and seal leak rates
- Characterized flow in microfluidic device using COMSOL

Jet Propulsion Laboratory, Thermal Engineering Section Intern June '10 – Aug '10

- Performed calculations for experimental thermal system
- Conducted thermal stability tests on a refrigerated bath circulator
- Gained experience in data acquisition systems, power supplies and temperature measurement methods

Langley Research Center, Structural Engineering Section Intern June '09 – Aug '09

- Created finite element meshes for variant Ares V vehicle geometries
- Applied structural load cases in NASTRAN
- Optimized weight of Ares V vehicle shroud in HyperSizer

ACTIVITIES AND HONORS

- University Honors
- Engineering Honors
- ASME Member
- NASA MUST Scholar
- Temple Foundation Graduate Fellowship