William (Daniel) Whitten

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EDUCATION

Texas A&M University (TAMU), College Station, TX — May 2015
Bachelor of Science in Mechanical Engineering
Cumulative GPA: 3.94
75% of educational expenses financed through scholarships

SKILLS

Software: Solidworks, Microsoft Office, Abaqus (finite element analysis)
Programming: Python, MATLAB, Microsoft VBA, Arduino, HTML, familiar with Labview
Language: Intermediate proficiency in spoken and written Spanish

WORK EXPERIENCE

TAMU/NSF Research Experience for Undergraduates, College Station, TX
Aerospace Materials Systems Program Participant (40 hours/week) — Summer 2013

- Integrated optimization algorithms with finite element analysis to create framework for objectively determining material parameters of complex non-linear materials
- Applied this calibration framework to cutting-edge NASA project to identify properties of microscopic sensing *shape memory alloy* particles used for damage detection
- Honed communication skills through weekly presentations and in-depth reports

Texas A&M Department of Aerospace Engineering, College Station, TX
TiiMS Undergraduate Research Assistant (10 hours/week) — Spring/Fall 2012

- Developed autonomous electronic control system for innovative "*shape memory alloy* morphing surface" as part of collaboration with the TAMU Architecture department
- Designed and built *shape memory alloy* demonstration model that features electronic automation and LCD screen; used in numerous educational and recruiting events
- Revamped and completely redesigned tiims.tamu.edu, the research group's web site

NORDAM Division of Nacelles & Thrust Reverser Systems, Tulsa, OK
Engineering Summer Hire (40 hours/week) — Summer 2012

- Revised/complied stress analysis reports and developed new report template, cutting nearly a week off the reports' expected submittal date
- Initiated thermal property testing of critical aerospace fiber-reinforced composites

Fellowship Bible Church, Tulsa, OK
Maintenance Worker (25 hours/week) — Summer 2010 and 2011

- Engaged in diverse hands-on projects such as light construction and event preparation

ACTIVITIES

Shape Memory Alloy Aerospace Actuator Design Team, Texas A&M — Jan.-July 2013

- Worked with 5 TAMU undergraduates and visiting Boeing researcher to design, build, and test airfoil with experimental wing flap controlled by *shape memory alloy* actuator
- Tested fully-functional prototype in wind tunnel within 6 months of project inception

Engineers Without Borders, Texas A&M — 2011-2013

- Collaborated with TAMU students to redesign a Costa Rican water distribution system
- Initiated relationship with Costa Rican supplier to purchase optimal water tank design

Campus Crusade for Christ, Texas A&M — Fall 2011-Present
American Society of Mechanical Engineers, Texas A&M — Fall 2011-Present

HONORS

ASCO Numatics Industrial Automation Engineering Scholarship

- One of two students selected from national pool of approximately 700 applicants

TAMU Engineering Honors Certificate Candidate
Pi Tau Sigma, *Mechanical Engineering Honor Society*
President's Endowed Scholar

- Texas A&M's flagship academic honor for incoming freshman

National Merit Scholar

- Awarded for scoring in the top one half of one percent in the state on the PSAT