

Trishala Chaudhary

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EDUCATION

Rensselaer Polytechnic Institute, Troy NY
B.S. in Aerospace and Mechanical Engineering

Estimated Graduation: May, 2018

GPA: 3.14, Dean's List

WORK EXPERIENCE

The Boeing Company- Boeing Defense, Space & Security - Houston TX

Summer 2016

International Space Station Active Thermal Control Systems (ATCS) Engineering Intern- EAH

- Assist with the procurement and acquisition of new and updated hardware for the ATCS on the International Space Station.
- Assess the health of the ATCS internal thermal loop by performing OPA (antimicrobial agent) degradation analysis.
- Perform thermal and hydraulic analysis for updating the ATCS for installation of Lithium-Ion batteries to allow temperatures to remain within specified ranges.
- Develop and lead intern booth for Multicultural Awareness Festival as well as serve as ambassador on Ask an Engineer panel.

The Center for Flow, Physics, and Control (CeFPaC)- Troy NY

Spring 2016-Current

Undergraduate Research Assistant; Research Advisor: Dr. Miki Amitay

- Develop and test novel design-integrated technologies and 3D printed prototypes at multiple scales towards improved aerodynamic performance of multi-scalar structures.
- Assist in data acquisition, model calibration, tunnel setup, and data analysis and visualization for collaborative publication
- Construct models using CAD software, soldering, sanding, and various forms of machining to make sure specifications met.

Rensselaer Polytechnic Institute- Troy NY

Fall 2015-Current

Admissions Ambassador

- Friendly face accountable for giving tours and answering questions utilizing diplomatic manners.

Resident Assistant

- Responsible for building a community by becoming a familiar first resource for students with institutional questions through social interactions and planned programming.

Physics and Mathematics Mentor

- Academic and social mentor for first year students to ensure successful transition from high school to college. Duties include weekly sessions for several groups of 15 students, concept revision, and quiz administration.
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RELEVANT COLLEGIATE PROJECTS

Introduction to Engineering Design/Professional Development, Team Manager

Fall 2015

- Invented *S.E.V.E.N. Sense*, a revolutionary device which alerts hearing impaired individuals of fire alarms.
- Utilized the teamwork and the design-build-test procedure to create mechanical housing for pendant, soldering for circuitry, code for Arduino signaling, as well as produce a 120 page technical paper.

American Society of Mechanical Engineers, Team Member

Fall 2015

- Placed first in competition to design a paper airplane which maximizes horizontal flight distance through the utilization of an innovative hoop design.
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TECHNICAL SKILLS

SINDA/FLUINT; Fortran; SpaceClaim; Computer Science I: Python; Computer Aided Design (CAD): NX9; Microsoft Office; Adobe Photoshop.

LEADERSHIP EXTRACURRICULARS

Rensselaer National Society of Black Engineers, Professional Development Chair

Spring 2016-Current

- Help students become successful in careers through developing and presenting informational seminars.
- Coordinate resume critiques as well as inviting industry members to meet with interested parties on campus.

Red & White Alumni Association, Tour Coordinator

Spring 2015-Current

- Organize outreach events for Alumni as well as represent RPI at networking receptions.
 - Select members for tours and provide tour information, training and scheduling.
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VOLUNTEERING AND COMMUNITY SERVICE

Tamarac Elementary School, Activity Facilitator

Spring 2016- Current

- Develop and present lesson plans to teach first and fifth graders about sustainability significance.

Rensselaer Society of Women Engineers, Outreach Member

Fall 2014-Current

- Girl Scout Engineering Day: engaged young girls in physics by building marble rollercoasters.
 - Mater Christie Middle School: held a buoyancy competition to help students understand basic principles behind boats.
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