



**The Institute of Electrical and Electronics Engineers
(IEEE)**



Galveston Bay Section Meeting

Organized by Computer Society Chapter

August 16th, 2018 (Thursday) Meeting

TOPIC: “The Nail Clippings Airborne Prevention System (NailCAPS) Project”

SPEAKER: Amy Caldwell, NASA Johnson Space Center

PRESENTATION:

The Nail Clippings Airborne Prevention System (NailCAPS) project's goal is to design and prototype a nail clipping system to prevent injuries to the astronauts and equipment malfunctions on the International Space Station due to airborne nail clippings getting into the astronauts' eyes and lungs, and into science experiments and hardware. Throughout the design and prototyping phase, the NailCAPS project has been extensively using the Computer-Aided Design (CAD) software "Creo Parametric" and a FlashForge 3D printer to rapidly and accurately design and prototype various components. The use of the CAD software and 3D printer has allowed the NailCAPS project to quickly test, refine, and optimize many different iterations of their current nail clipping system in order to produce the best possible end product.

GUEST SPEAKER:

Amy Caldwell is a Junior working toward a degree in Mechanical Engineering and a minor in Aerospace Engineering at Oregon State University in Corvallis, Oregon. In her free time, she enjoys working on several competitive rocketry teams, dancing, and spending time outside with friends. She has interned for NASA twice, first in the Summer of 2017 at Marshall Space Flight Center, where she designed and built ground support equipment for the cube satellite "NEA Scout" and this summer at Johnson Space Center, where she has been working on designing and prototyping a nail clipping system for the astronauts aboard the International Space Station, and analyzing payload anomaly reports for trends in human error.

Gilruth Recreation Center NASA-JSC, Discovery Room (downstairs)

Free parking. No security processing required. Easy drive in off Space Center Blvd. See website below for map.

Interested non-IEEE engineers, technicians, scientists, IEEE Members and guests alike are welcome!

12:00 PM – 1:00 PM - Program and Q&A, bring brown bag lunch if desired

Please RSVP to attend By COB Wednesday August 15th

RSVP should be made by email to:

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