

NASA HUNCH Design and Prototype

Zero-g Washing Machine Finalists 2020

Congratulations to the following teams who are invited for the Final Design Review in Houston at Rocket Park on Johnson Space Center April 15, 2020. If you see any mistakes in names or other information, please send me your corrections and I will update each of the lists accordingly. Teams that are listed here should make updates their designs and presentations. Improvements to the prototypes and presentation boards should reflect comments made by the mentors and evaluators. These pictures are not placed in any type of order and do not reflect any kind of scale or ranking. I intend for all of the lists to be posted to the HUNCH design web page and will remain there so students can reference it when applying to schools and universities.

I am very proud of the work everyone has done and wish all of you the best of luck.

Pointers for Zero-g Washing Machine:

I do not expect this prototype to be made of flight materials but it should be as fully functional as possible. There should not be any cardboard. 3D prints are good but you should move beyond wood components when possible. Be able to demonstrate an article of clothing going through.

How do you expect the article of clothing expect to be passed to your segment?

How does the clothing move from your component to the next segment of cleaning?

What happens if the clothing gets stuck? How would the crew get it unstuck?

If you are making the controls, be able to show multiple motors can be controlled forward and backward. There are multiple sensors for water, location of the clothing,

Is your system able to tell if the clothing has arrived in a different segment or if it gets stuck?



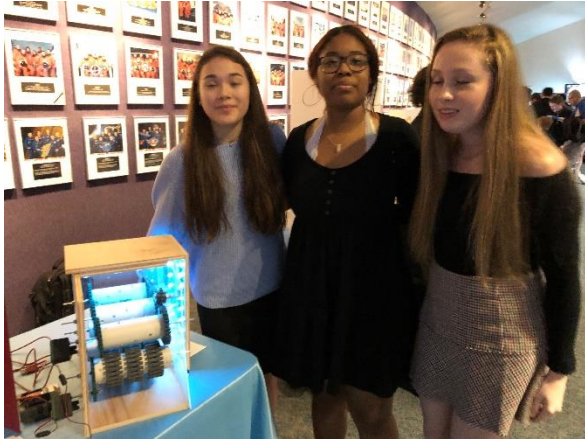
Students: Connor Lussow, Diego Sena, Caleb Wolf
Project: Washing Machine—stage 4
Teacher: Matt Brown
Mentor: Alli Westover, David Schlichting
School: Lakewood—Colorado



Students: Ethan Feldman, Joseph Shunaula
Project: Washing Machine Controls
Teacher: Thomas Viola
Mentor: Flo Gold
School: Platt---Connecticut



Students: Vugar Sadygov, Nicholas Showman, Peyton Burlington
Project: Washing Machine Controls
Teacher: Elizabeth McCarty
Mentor: Glenn Johnson
School: Clear Creek-- Texas



Students: Zoe Lewis, Briana Zamora, Catherine Corley, Jaelyn Silva, Tyler Cornor, Jake Singleton
Project: Washing Machine--disinfection
Teacher: Robin Merritt
Mentor: Glenn Johnson
School: Clear Creek—Texas



Students: GRACE MEYER, RUSHIL PATEL, MUHAMMAD REHAN, PEYTON BURLINGTON, YOUSIF MUSTAFA, ALONDRA SOLIS
Project: Washing machine--disinfection
Teacher: Robin Merritt
Mentor: Glenn Johnson
School: Clear Creek--Texas



Students: Minh-Nhat Nguyen, Alex Loney, Ethan Hargus
Project: Washing Machine Controller
Teacher: Michael Hayes
Mentor: Alli Westover
School: iSchool--Texas



Students: Tommy Rohmann, Ethan Vernon, Daniel Clark
Project: Washing Machine
Teacher: Raymond Gerstner
Mentor: Flo Gold
School: Glenelg--Maryland



Students: Zedrick Zamora, David Iturbide, Anthony Zacateco, Jose Herrera
Project: Washing Machine--disinfection
Teacher: Chris Beyrouthy
Mentor: Flo Gold
School: Wapato--Washington