Project Title: IEEE EPICS - Fully Automation Evacuation Device

Objective:

The new goal at phase 2 will be the fully automation without operators' physical touches on the evacuation device, and it will be implemented by (1) instrumenting the prototyped device for all main variables that affect stability and operation of the device, (2) incorporating additional actuators to apply necessary forces to sustain smooth operations of device, and (3) integrating everything into a data-driven control systems for safe and reliable operation of device. Other than the safety requirements, quantified requirements include load (up to 400 lbs), speed (i.e., 30 steps/min), folded space less than 1.5 m in length, 0.7 m in width and 0.4 m in height, self-weight less than 200 lbf, and the amount of time per charge more than 6 hours.

Number of ECE Students:

3 ECE Students.

Faculty Advisor:

Dr. Zhuming Bi (ME)

Dr. Guoping Wang (ECE)

Budget:

$5500 for mechanical and electrical supplies/parts