

# Developing Security Education Materials for Future Advanced Manufacturing Engineering Workforce

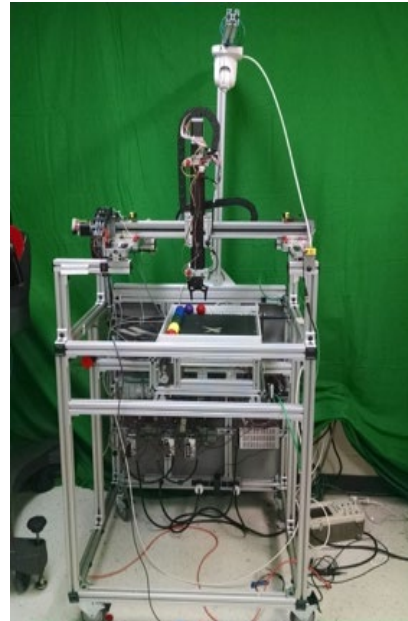


## Challenge:

Security education in AMS (advanced manufacturing systems) falls behind

Bridge the gap b/w CS and ENGR students and workers

Need to design both course modules and platform for hands-on experiments



Security Ed in CS and ENGR Major Courses

↓

Hands-on exercises for both majors

↓

Professional Training in AMS

## Scientific Impact:

Bridge the gap in security education for AMS

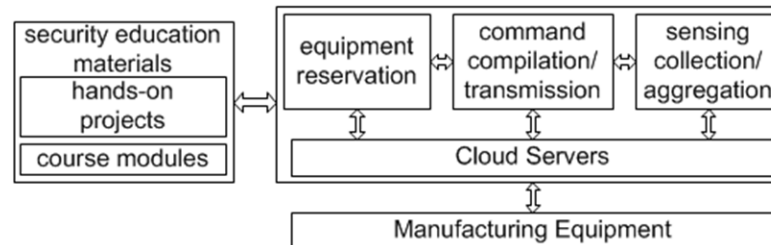
Non-intrusive security measures for legacy CPS system

Cloud based experiment environment with real industrial equipment

## Solution:

Education materials on security of communication, control, and sensing in AMS

Systematic evaluation at both CS and ME courses



## Broader Impact:

Train qualified workforce for thousands of openings in manufacturing industry

Provide interdisciplinary research/education experiences to both faculty and students

Award: 1523096. PIs: Weichao Wang, Aidan Browne, Chuang Wang, and Wesley Williams