

CPS 364X: CYBER-PHYSICAL SYSTEMS & APPLICATIONS – SPRING 2023

Instructor: Aditya Balu

Co-Instructors:

- i. Adarsh Krishnamurthy
- ii. Soumik Sarkar
- iii. Cody Fleming

Time: TR 2:10-3:25PM

Location: 2228 Howe Hall

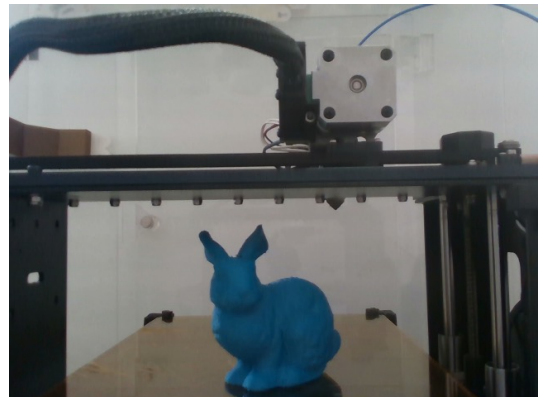
Prerequisites: ENGR 160 or Equivalent, MATH 267, Python

Project Based Course; Course Description: Fundamental principles of cyber-physical systems and their system-level applications at an introductory level; computer programming of physical systems; data communication; control loops; More information on cyber-physical systems can be found at [CPS Minor website](#).

Note: Knowledge of Python may be demonstrated by having taken course using Python at ISU or elsewhere, including other CPS courses ME 280X, CPR E 287X, or independent learning.

■ Projects:

- **Sensing:** Programming of physical systems: Additive Manufacturing
- **Sensing + Communication:** Object-detection and tracking using multiple cameras
- **Sensing + Communication + control:** ROS-based Path Planning using turtlebots.



Live stream 1



Live stream 2

