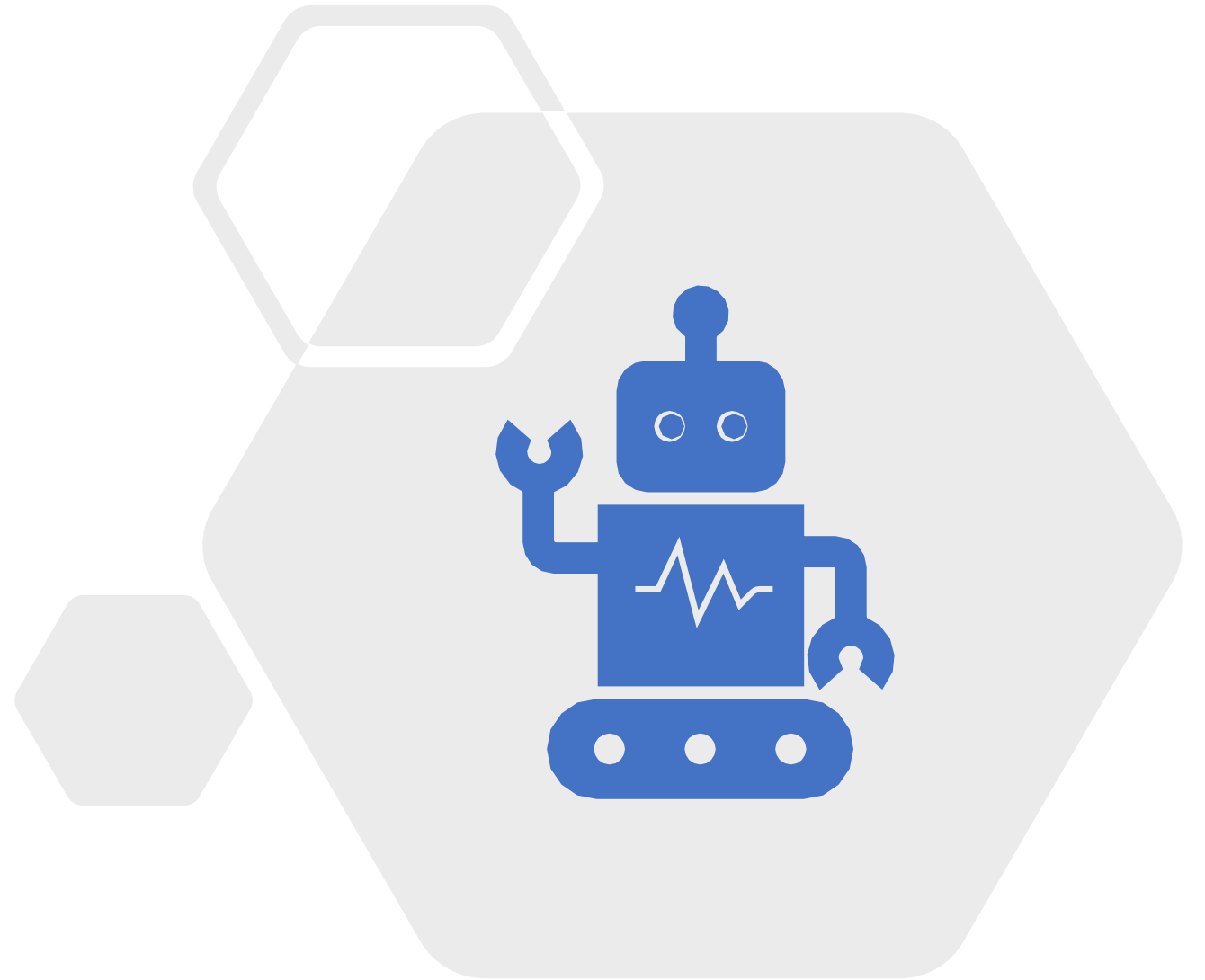# Cyber-Physical Systems

An interdisciplinary Research and Academic Cluster, anchored in:
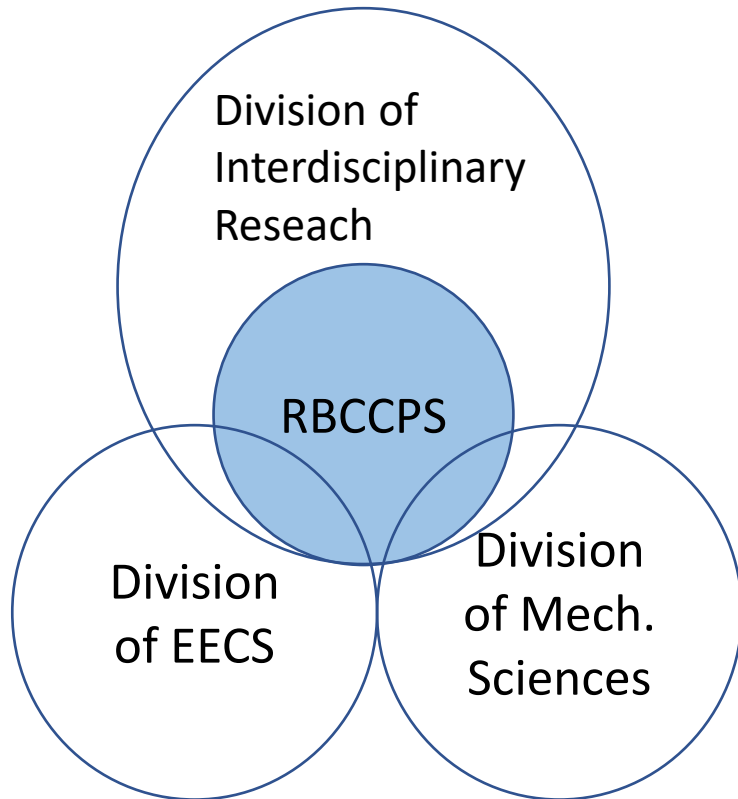
Robert Bosch Centre for Cyber Physical Systems @ IISc

About

- Anchored in RBCCPS – a centre under Division of Interdisciplinary Research
  - 38 **Interested** Faculty across 8 departments (centre supports some of their research via funds)
  - 10 **Associate** Faculties (more intimately involved in the centre's academic and research program – physically sit in their own departments)
  - 2   **Joint** Faculties (joined 2020) (**physically sit in the centre**)
- Running an Inter-disciplinary PhD program in CPS.
  - 27 students in last 3years
- Plans to start a new Masters program in CPS/Robotics/Autonomous Systems
- Research Themes:
  - Data driven Control, Non-linear Control, Networked Control, Safety Critical Control, …
  - Social and Epidemiological Network Dynamics, Traffic Networks, Biological Networks, Robot Networks, Swarms, Game theory,…
  - Formal Techniques for CPS, AI & ML Techniques for CPS, Software and Systems Engineering for CPS, Security in CPS,…
  - Legged Robots, Autonomous Drones, Autonomous Ground Vehicles, Large Scale IoT Systems, Nanobots, Drone Skyways, Tele-robotics , Robot-Human Interactions, …
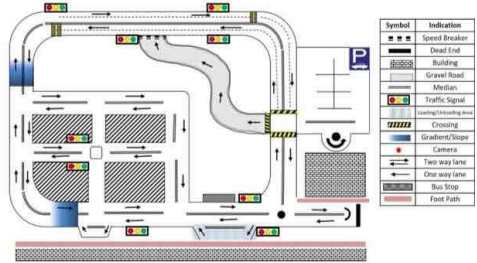
About the centre (RBCCPS)

About
- Started in 2011
- Supported by annual Philanthropic grant from Robert Bosch Group of Companies
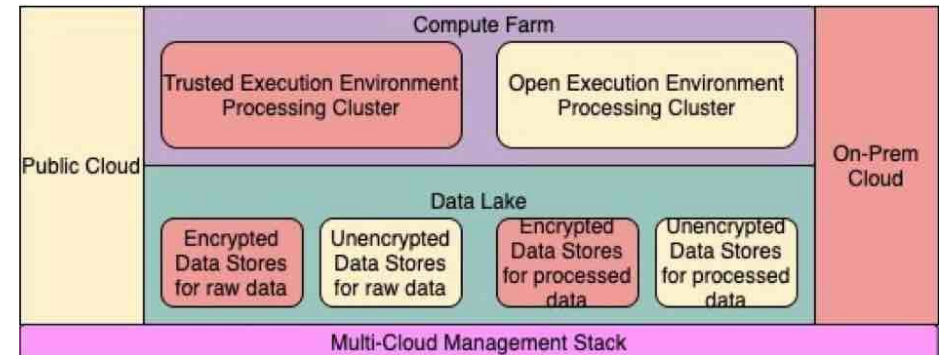
New Programs @ RBCCPS:
- Cisco Centre for Networked Intelligence (2019-)
- Nokia Centre for Networked Robotics (2020-)
- Garret Centre for AGV (2020 -)
- AI & Robotics Technologies Park (2020-)

Facilities @ RBCCPS

- Makery : Maker space for Robotics and CPS

- Dronery: Drone Test Facility

- Vaahanam: AGV Test Facility with 5G

- Datasetu: For Data Analytics Test bed

- New Bldg: Tata X-Hub

Recruitment in CPS

- Looking for strong candidates with research interests in CPS
- If you are also interested in Applied/Experimental Research
  - Consider applying to RBCCPS as well (besides the depts in EECS or Mech. Sc.)
  - We have the joint appointment feature now.
  - Two Broad Application Themes:
    - Robotics & Autonomous Systems
    - Socio-Technical Systems (Humans-Society-Technology)
  - Please Mark 'CPS' when you apply online
    - if you want to be a "**Joint Faculty**" with RBCCPS
- Email: chair.cps@iisc.ac.in
- Website: cps.iisc.ac.in

Thank You