

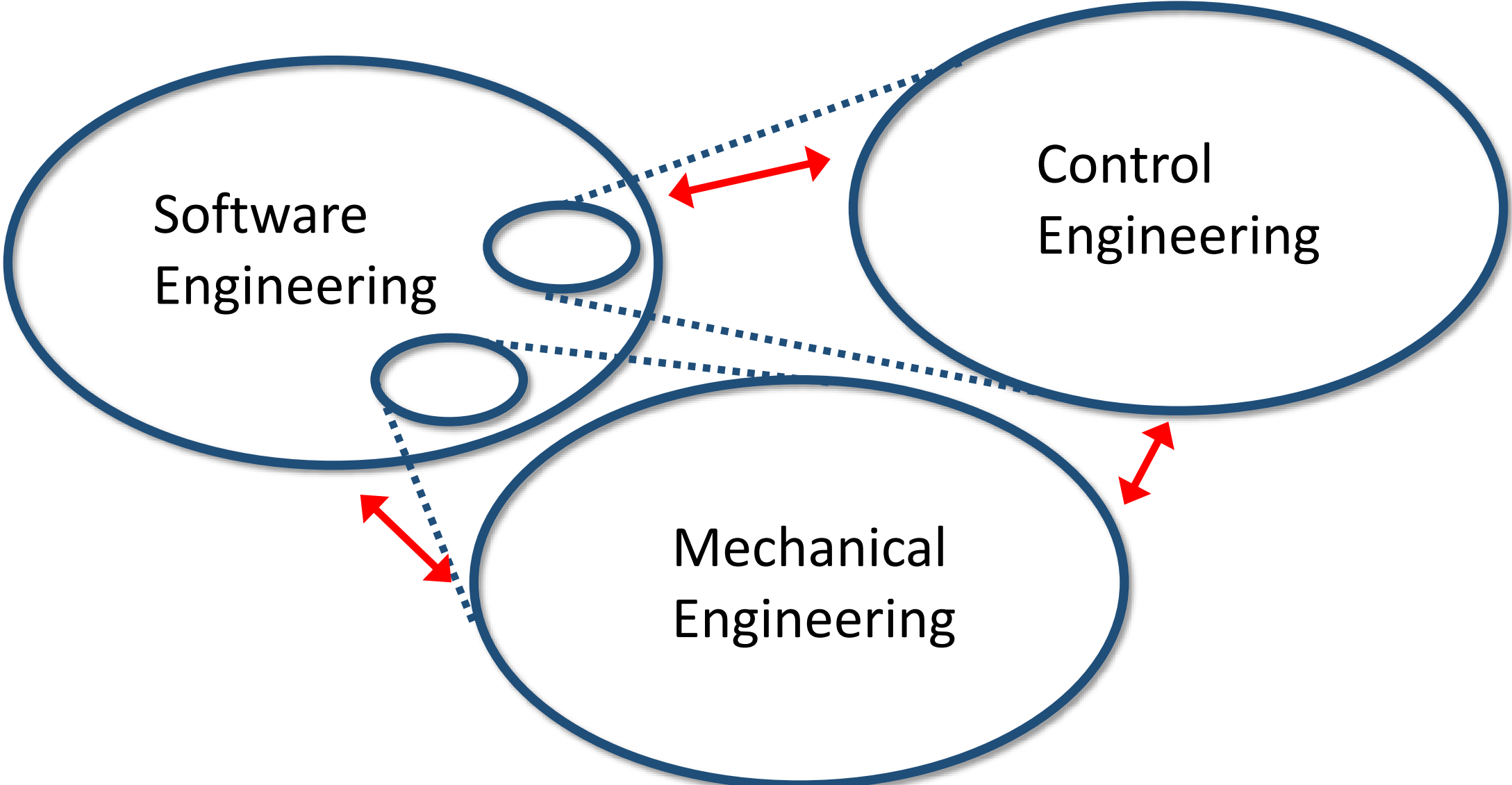
# Aligning different disciplines

Danny, Ilias, Franco, Mohammad

# Which disciplines?

- Technology stack perspective
  - Hardware level
  - System level
  - Software level
- Engineering perspective
  - Electronics
  - Mechanics
  - Software

# The CPS world



# How to make the alignment?

- Respect disciplines!
  - Every discipline has its own (proven) representation
- Cross-world connections
  - What is the vocabulary to talk to each other?
- Identify the mismatches
  - Type level (SE) vs instance level (control)
- Identify what is typically assumed from one world for the other

# Who manages the alignment?

exploratory

certified



For certified systems: Senior from one of the domains

The manager's role spans from controlling to facilitating

If it's a greenfield design, who will **design** the overall system?

# Reflections

- Disciplines can learn for each other
- Be open-minded
- Role of education?
- Empirical research to understand the world of CPS (a la Christina)
  - Is there enough awareness that there is lack of alignment in CPS?
  - How big is the gap between disciplines?
  - Is there a *need* for alignment? When/Where?