

# Crane collision avoidance

Improve factory safety by implementing collision avoidance system

Collision avoidance is needed for enabling autonomous movement of crane. Cranes are used to lift and move loads ranging from small to very heavy loads. The heavier the load, the more kinetic energy and the more damage can incur in event of collision. Cranes are otherwise "hidden" in factory ceiling level, but hook block and load can be an obstacle when passing by. Crane tasks are often performed by operator having a direct eyesight, hence hook & load surroundings are important to be observed at all times to avoid collisions.

KONECRANES is the world leader in material handling equipment and its products are highly advanced in technological features available. Could we improve safety of crane and other systems by implementing collision avoidance system?

System needs to consider collisions from crane to others (hook moving) as well as other objects to crane (other approaching a still hook). For technical solution, we are looking for a simple, effective, accurate and easy to scale to all assets in factory.

Beneficial skills for the project:

- Conceptual design
- Electrical engineering
- Software & automation

