Robopec

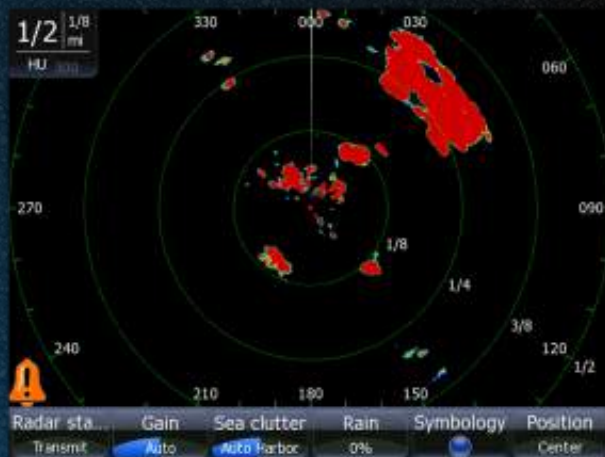Design and development of mechatronics systems with embedded intelligence

Maritime Detection and Tracking (MDT)

IR DETECTION (INFRARED)

- **Several targets detection and tracking**
- **No inertial measurement unit required**

RADAR DETECTION

- **Tracks detection from a radar image**
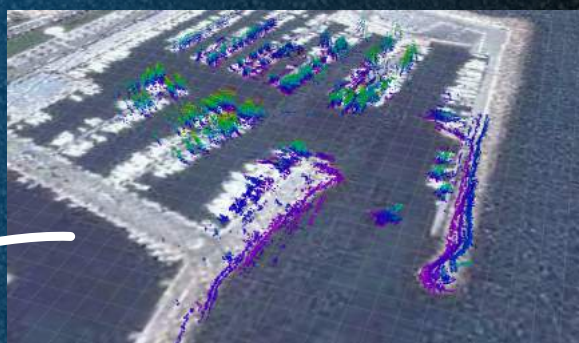- **Filtering and tracking**

MULTISENSOR FUSION WITH SEA MAPS (ENC)

- **Kalman filter: fusion and tracking**
- **Sea map representation**
- **Robust to sea states, heave, and vessel roll and pitch**

LIDAR DETECTION

- **2D and 3D occupancy grid**
- **Obstacle and mobile objects detection**

AIS

- **Acquisition of other ship's AIS messages**

APPLICATIONS

> **MARITIME SECURITY**

- **Surveillance and control of coasts and harbors**
- **Protection of ships against piracy**
- **Collision prevention**

> **USV (UNMANED SURFACE VEHICLES)**

- **Obstacles avoidance**
- **Autonomous navigation**

• www.robopec.com •