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Mobile Robotics

- Intelligent vehicles
- Unmanned aerial vehicles



➤ Autonomous navigation

- ✓ Perception

Localization, Moving Obstacle Tracking (MOT), SLAM, Vision system (LIDAR, Radar, camera, etc), dynamic grids for environment perception

- ✓ Decision

Local path planning and obstacle avoidance

- ✓ Global robot control

Model predictive and robust control

➤ Mobile Robots in interaction

- ✓ Navigation in constrained environment

- ✓ Reactive navigation in open and dynamic environments

- ✓ Multi-robots systems (intersection, convoy or swarm)

- ✓ Human-robot cooperation, supervised autonomy

