EC601 Project 1 proposal

Problem Statement

Delivery Robot is a complex engineering product in the industry. We need an algorithm about road planning, an algorithm for avoiding obstacles and an algorithm for detecting human and other features. There are lots of details relating to the delivery robot.

Application

Technology from delivery robots will help us develop self-driving technology, automate package delivery and so on.

an initial list of papers

- L. Fridman et al., "MIT Advanced Vehicle Technology Study: Large-Scale Naturalistic Driving Study of Driver Behavior and Interaction With Automation," in IEEE Access, vol. 7, pp. 102021-102038, 2019, doi: 10.1109/ACCESS.2019.2926040.
- 2. R. J. Szczerba, P. Galkowski, I. S. Glicktein and N. Ternullo, "Robust algorithm for real-time route planning," in *IEEE Transactions on Aerospace and Electronic Systems*, vol. 36, no. 3, pp. 869-878, July 2000, doi: 10.1109/7.869506.
- 3. E. Nishani and B. Çiço, "Computer vision approaches based on deep learning and neural networks: Deep neural networks for video analysis of human pose estimation," 2017 6th Mediterranean Conference on Embedded Computing (MECO), 2017, pp. 1-4, doi: 10.1109/MECO.2017.7977207.

open source projects to study

- https://github.com/lvLabs/autonomous-delivery-robot. Autonomous Delivery Robot
- 2. ApolloAuto