## PERSONAL PROFILE

I am a M.S. student in Robotics at NCTU, I am interested in manipulation, especially building an intelligent system that can automatically put products on the shelf and checkout in retail industry!

### CONTACT

- EE622, 1001 University Road, Hsinchu 300, Taiwan, ROC
- sean19960914@gmail.com
- (+886)-933567455
- sean85914

### EDUCATION

MS of Graduate Degree Program of Robotics, Nation Chiao Tung University

2018-Present

### SKILLS

- Develop Tools
  - ROS (Robot Operating System)
  - PyTorch
- Programming
  - C/C++
  - Python
- Matlab
- Language
  - Chinese
  - English

# PROJECTS AND PROFESSIONAL EXPERIENCE

### PICK AND PLACE SYSTEM

- We are aimed to building a system which can automatically pick
  the object and place it in the shelf with the cue of brand name. We
  used brandname-based fully convolutional network to find the
  affordance of the product. The system consists of two robot arms,
  one with suction gripper and the other with parallel-jaw gripper, the
  former can pick the target from cluttered environment and the
  latter is for putting target on the shelf.
- In the team, I am responsible for manipulation of dual robot arms.

### • DARPA SUBTERRANEAN CHALLENGE, 2019

- The "SubT" Challenge aimed to seeks a novel approaches to rapidly map, navigate, and search in underground environment automatically.
- In the team, I am responsible for navigation of AGV.

### RECENT PUBLICATION

Y.-S. Su, **S.-H. Lu**, P.-S. Ser., W.-T. Hsu, W.-C. Lai, B. Xie, H.-M. Huang, T.-Y. Lee, H.-W. Chen, L.-F. Yu, H.-C. Wang, "Pose-aware Placement with Semantic Labels - Brandname-based Affordance Prediction and Cooperative Dual-Arm Active Manipulation", Accepted by IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS, 2019)"