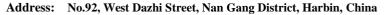
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Harbin Institution of Technology

哈爾濱ノ業大学



Personal Statement

I have studied in Harbin Institution of Technology (HIT) since 2013. In 2017, I obtained a Bachelor degree with a major in control science and engineering. Nowadays, I am pursuing a doctor's degree with research area of heterogeneous robot system dynamic task planning and control supervised by Prof. Changhong Wang. During this period, I participated in several research projects of the Ph.D. supervisor. While learning the core task planning and control architecture, I also improved my engineering ability and mastered important tools such as single smart UAV path planning algorithm, C++, Python, Robot Operating System (ROS). Recently, I am enthusiastic about the problems on dynamic task assignment and path planning which could be used in partially observable heterogeneous robots system.



English

♦ PETS5 ♦ CET-6

Research Skills

> Interests:

Path planning (A*, JPS, RRT, MDP, minimum snap etc.), Optimization Robot Learning, Reinforcement Learning,

UAV, Pixhawk Autopilot and MAVLink

Programming Languages:

C++, MATLAB, PYTHON

Tools/ Software:

Robot Operating System, Git, TensorFlow, Rviz

Educational Background

♦ 2013.9-2017.7 Harbin Institution of Technology Control Science and Engineering
♦ 2017.9-now Harbin Institution of Technology Control Science and Engineering
Doctor

Awards (Recent Two Years)

- ★ Champion of Intelligent UAV Cluster System Competition (over 50 teams participated), 2018. (Team Leader)
- ★ Winning prize of the Global (China) MathWorks Minidorne Competitions for college students, 2019

Project Experience (Finished in Recent Two Years)

- ✓ **Development of UAV Collaborative cluster system in unknown environment.** I am responsible for targets assignment and path planning for UAVs. April 2018- July 2018
- ✓ **Parrot mini drone path recognition and tracking using Simulink.** I am the supervisor of the project and I am responsible for project design and control algorithms. September 2019- November 2019
- ✓ Smart UAV landing on moving UGV platform. I am responsible for project design and control algorithms, in cooperation with Zhaozhe Wang. June 2018- March 2019

Teaching

➤ Teaching Assistant, Motion Planning for Mobile Robotics, By Fei Gao (HKUST), Shenlanxueyuan, 2019.09-Present

Hobbies

- ♦ Model Airplane (2nd Prize of Aero Sports Federation of China)
- ♦ Running (PB for Half-Marathons: 2hours and 4minutes)
- ♦ Table-tennis and tennis

CV·Bo Liu

