# Fan Li

 $(+86)132\text{-}5050\text{-}8038\,(\text{Telephone})$ 132 Waihuan East Road, Panyu District, Guangzhou, China (Address) lifan<br/>63@mail2.sysu.edu.cn(Email)510006(Postcode)

# **Education Experience**

### Sun Yat-Sen University

Master of Engineering

School of Data and Computer Science Software Engineering

2018.09 - 2020.06

- GPA: 88.1/100
- Related Courses: Digital Image Processing, Stochastic Processes, Modern Artificial Intelligence.

# Tongji University

Bachelor of Engineering

School of Automotive Studies Vehicle Engineering (Automobile)

2013.09 - 2018.06

- GPA: 83.23/100
- Related Courses: Automobile Theory, Automobile Design, Computer Hardware Technology, Automatic Control Theory, Computer Software Development.

## **Publication**

• [1] Fan Li, Yunxiao Shan, Mingyue Cui, Kai huang: *DeepPlanning: Deep Learning-based Planning Method for Autonomous Parking*, (Under review at The International Conference on Automated Planning and Scheduling (ICAPS))

# **Projects**

- Motion Planning for Autonomous Driving
  - My research topic during the Master period is motion planning for autonomous driving. I focus on the fusion of traditional methods and deep learning methods. Specifically, I work on using the deep convolutional neural networks (YOLO, R-CNN, etc.) to provide a more effective heuristic for sampling-based planning methods (RRT\*, Bi-RRT\*, etc.).
  - From Sep. 2018 to May 2019, I had proposed a method: using CNNs to generate a more applicable sampling heuristic for RRT\* used for autonomous cruising. The work derived an invention patent.
  - From May 2019 to Now, I am working on path planning for autonomous parking. I propose a two-stages method using firstly CNNs to infer a path directly and then RRT\*-based algorithms to guarantee the path is feasible. A paper of that work is reviewed by the ICAPS conference now.

### Awards

• Third-level Excellent Graduate Student Scholarship of Sun Yat-Sen University	2019
• Third-level Excellent Graduate Student Scholarship of Sun Yat-Sen University	2018
• The Overall Winner of PUMA project on PACE Annual Global Conference	2017
• Outstanding Student of General Motors PACE	2015
• Third-level Excellent Student Scholarship of Tongji University	2014

## Skills

- English: IELTS 6.0(L6.0+R7.5+W5.5+S5.0), GRE 311(V148+Q163)+3.0
- **Programming:** Programming: Tensorflow (proficiency), CARLA (proficiency), ROS (proficiency), Python (proficiency), Matlab (basic), C/C ++ (basic).
- Interest Fields: Geometry, Planning, Machine Learning, Autonomous Driving