

# Fan Li

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## 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