

# Mr Xiaotong Li

D. O.B.: May 22, 2001 | Mobile: 86-18136601928 | E-mail: 12430715521xt@gmail.com

## □ EDUCATION BACKGROUND

**Nanjing University of Aeronautics and Astronautics**

09/2019-06/2023

Major: Aircraft Design and Engineering (Excellence Program)

Degree: Bachelor of Engineering

GPA: 89/ 100

Graduation Dissertation: Gradient Enhanced Neural Networks for Optimization of Airfoils

**Technology University of Delft**

09/2023-07/2025

Major: Robotics

Degree: Master of Science

GPA: 8.63/ 10

## □ Public Exams

IELTS: 7.5, GRE: 328+3.5

## □ INTERNSHIP

**Beijing, BJROBOT Technology Co. Ltd.**

04/2023-05/2023

Position: ROS Assistant Engineer

Working Contents: Develop TurtleBot3 to do multiple missions (reduplicate the function of Autorace)

**Shanghai, Bayer Crop Science Co. Ltd.**

07/2023-08/2023

Position: ROS Engineer

Working Contents: Use Isaac Sim to build a vivid to life simulation platform of automated guided vehicles in a setting of intelligent agriculture.

## □ INTERNATIONAL EXPERIENCE

**KAIST, Human-Robot Interaction Research Center (Summer Camp)**

07/2022

Focus: Soft Pneumatic Actuators

Learn how to design a soft pneumatic gripper and its control method.

## □ RESEARCH EXPERIENCES

04/2022-06/2022

**Participant, MISSION 9 of the International Aerial Robotics Competition (IARC)**

- Responsible for flight control test and its optimization.

04/2022

**Participant, RoboCup China Open**

- Responsible for establishing point clouds for the depth information read by the depth camera and performing plane extraction and calculation of characteristic shapes

- Won the second prize

03/2022-03/2023

**Leader, Gradient Enhanced Neural Networks for Optimization of Mars Low Reynold Number Airfoil**

- Calculated aerodynamic parameters of airfoils at different angles of attack, Ma numbers and Re numbers
- Constructed mSANN with TensorFlow using aerodynamic parameters and corresponding gradient information as training samples
- Optimized Mars low Reynolds number airfoil design by using mSANN as a surrogate model coupled with gradient optimization software package SNOPT

08/2021

**Participant, RoboMaster2021 Super Match Play Competition (Central Division)**

- Responsible for the function realization of radar station, that is, using yolo model to identify enemy robots and mark them on our map

- Won the second prize

04/2021 **Leader, The 6th Jiangsu Provincial Engineering Training Comprehensive Ability Competition for College Students**

- Drew the aircraft model and calculated the aerodynamic characteristics with fluent, and produced simulation animations with 3DMax
- Won the second prize

03/2021-03/2022

**Leader, Dynamic Formation Transformation and Obstacle Avoidance of Unmanned Vehicles**

- Realized autonomous obstacle avoidance based on slam and multi-vehicle communication through wireless networking, mainly implemented the control of unmanned vehicle through ros system
- Realized mapping and navigation functions with ros, and conducted simulation tests with gazebo
- Nominated to the 15th National College Student Innovation and Entrepreneurship Annual Conference

03/2021-03/2022

**Participant, Research on Positioning and Identification Methods of Logistics Sorting Robot**

- Implemented the autonomous object sorting of a logistics robot based on slam, machine vision and neural network

- In charge of slam mapping, production of training sets and training the neural network to recognize the specified objects  
11/2020 **Participant, RoboCup China Open**
- Enabled the robot to identify the hole positions on a transparent acrylic plate with the visual recognition system (openmv)
- Won the third prize
- 08/2020 **Participant, RoboMaster2020 Super Match Play Competition (Online)**
- Participated in the design and drawing of the mechanical structure of the robot, and learned the overall process of making the competition robots
- Won the second prize
- 03/2020-04/2021 **Participant, Small Fixed-wing Attack UAV System**
- Responsible for processing the visual identity system

## **PUBLICATIONS & PATENTS**

- HongYu Chen, Xiaotong Li, Haosheng Li, Bohao Qian, Xiangxiang Li,  
Computer Software Copyright “Unmanned Vehicle Formation Navigation and Formation Switching System 1.0.0”

## **EXTRACURRICULA**

## **ACTIVITIES**

- 10/2021-
- 10/2019-06/2020 **Member, New Media Department, Student Union, Nanjing University of Aeronautics and Astronautics**
- Produced the official push of the wechat public account, took photos and edited videos of large-scale activities

## **AWARDS & HONORS**

- 2022 First Prize of Academic Scholarship, Nanjing University of Aeronautics and Astronautics
- 2021 First Prize of Academic Scholarship, Nanjing University of Aeronautics and Astronautics
- 2020 First Prize of Academic Scholarship, Nanjing University of Aeronautics and Astronautics
- 2021 Second Prize of Outstanding Student Scholarship, Nanjing University of Aeronautics and Astronautics
- 2020 Second Prize of Outstanding Student Scholarship, Nanjing University of Aeronautics and Astronautics
- 2021 Merit Student, Nanjing University of Aeronautics and Astronautics
- 2020 Merit Student, Nanjing University of Aeronautics and Astronautics