BINGQI HUANG

School of Aerospace Engineering, Tsinghua University, P.R. China Tel: +86 13519765005| Email: bingqih0311@gmail.com

EDUCATION

Xingjian College, Tsinghua University

Sept 2021 - Jun 2025

Bachelor in Theoretical and Applied Mechanics & Aerospace Engineering

Courses: Mathematics Analysis, Advanced linear Algebra, Programming Fundamentals, Ordinary Differential Equation, Partial Differential Equation, Tensor Analysis and Differential Geometry, Fluid Mechanics, Material Mechanics, Aircraft Structural Mechanics, Finite Element Analysis, Electrical Engineering and EDA fundamentals, Human Factors and Artificial Intelligence, Signal and System

School of Mechanical Engineering, Delft University of Technology

Sept 2023 - Feb 2024

Exchange Student in Robotics

Courses: Aerodynamics, Robot Software Practical, Scientific Programming in C++, Turning Technology into Business, Technology Entrepreneurship and Internationalization

School of Aerospace Engineering, Tsinghua University

Aug 2025 - Present

Ph.D. in Aerospace Engineering

Research Interests: Mobile Manipulation, Human-Robot-Interaction

RESEARCH EXPERIENCE

1. Autonomous Driving Robot Simulation

Advisor: Prof. Julian Kooij, Faculty of Mechanical Engineering, Delft University of Technology

- Build the simulation environment of Mirte robot
- Developing and coding obstacle and pedestrian detection algorithm based on OpenCV
- Developing and coding robot controller
- Implementing autonomous driving examples

2. Industrial Mobile Manipulator

Advisor: Prof. Zhaokui, Wang, School of Aerospace Engineering, Tsinghua University

- Designed and prototyped a n-wheel independent driving and steering Mobile Manipulation Robot
- Designed a holistic controller for Mobile Manipulator
- Sim-to-Real implementation

INTERNSHIP EXPERIENCE

1. Ericsson (China) Communications Co., Ltd.

Mentor: Jenny Li, Manager of Hardware Enclosure Design Group, Ericsson (China) Communications CO., Ltd.

- Building 3D models of Antennas in multiple designs
- Simulating impact tests on Antennas by ANSYS
- Simulating impact tests on composites by ANSYS Composite Pregpost (ACP)
- Drafting ACP tutorial for Ericsson engineers
- Researching composite vendors for Antennas

INTERESTS AND SKILLS

- 1. Language: TOEFL 105, CET4 605
- **2. Coding:** C, C++, Python
- 3. AI: Pytorch, OpenAI Gym
- 4. Software: ANSYS Explicit Dynamics, ANSYS Mechanical, Solidworks, ROS, Gazebo, Matlab, Office
- 5. Photography: unsplash.com/@k4media with over 8.5 million views

SELECTED AWARDS AND HONORS

- Tsinghua Alumni Future Technology Taihu Scholarship
- Tsinghua University Xingjian College Premier Xingjian Talent Scholarship
- Tsinghua University Xingjian College Distinguished Xingjian Talent Scholarship