## PERSONAL INFORMATION Zhongmou LI

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<u>zhongmouli.github.io</u>

Date of birth 19 Jan 1990 | Nationality China



#### **EDUCATION**

## Oct 2017 - Nov 2020 Ph.D. Student in Robotics

Institution Le Laboratoire des Sciences du Numérique de Nantes (LS2N), France

Theoretical developments and experimental evaluation of a novel collaborative

Research Designed controllers and allocators for a novel aerial manipulation robot Flying Gripper

Analyzed manipulation capacity of the robot Flying Gripper using convex analysis techniques

Applied control and allocation methods in real-time experiments

# Sep 2015 - Aug 2017 M.Sc in Advanced Robotics

Institution Centrale Nantes, France

Motion planning and control of a Flying Parallel Robot Thesis

#### M.Sc in Navigation, Guidance & Control Sep 2013 – Apr 2015

Northwestern Polytechnical University, China

#### B.Eng in Detection Guidance and Control Technology Sep 2009 - Aug 2013

Northwestern Polytechnical University, China

### WORK EXPERIENCE

#### Lab Assistant Teacher Nov 2017 – Today

Employer Centrale Nantes, France

> Instructed lab sessions for robotics master and engineering students including theoretical explanation and simulation demonstration

- Advanced modeling of robots
- Nonlinear control theory
- Control of linear multi-variable systems

#### Feb 2017 – Aug 2017 Research Assistant

Employer LS2N Nantes, France

Research Modeled a flying parallel robot consisting of quadrotors joined by passive links

Conducted motion planning considering dynamic constrains and payload limitations

### **RESEARCH SKILLS**

#### Robotics Quadrotors

- Underactuated Hands
- Serial and Parallel Robots
- Kinematic and Dynamic Modeling

Control – Linear, Non-linear Control

Adaptive ControlSliding Model ControlModel Predictive Control

Programming - ROS

- C++

- Matlab & Simulink

- Msc Adams
- Linux scripts

### **PUBLICATIONS**

[1] Zhongmou Li, Xiaoxiao Song, Vincent Begoc, Abdelhamid Chriette, and Isabelle Fantoni. "Dynamic Modeling and Controller Design of a novel aerial grasping robot". In: 23rd CISM IFToMM Symposium on Robot Design, Dynamics and Control (RoManSy 2020). Sapporo, Japan, Sept. 2020.

### **LANGUAGE**

Mother tongue Chinese

Other languages English C1 (Proficient user) French B2 (Independent user)