

## PERSONAL INFORMATION

## Zhongmou LI

📍 1 Boulevard Albert Einstein, 44300 Nantes, France

☎ +33 06 58 85 92 44

✉ [zhongmou.li@ls2n.fr](mailto:zhongmou.li@ls2n.fr)

📅 Date of birth 19 Jan 1990 | 🇨🇳 Nationality China

## CURRENT POSITION

Oct 2017 – Nov 2020 **Ph.D. Student in Robotics**

Institution LS2N, Centrale Nantes ([ec-nantes.fr](http://ec-nantes.fr)), France

Subject Theoretical developments and experimental evaluation of a novel collaborative

Supervisors Isabelle Fantoni, Research Director CNRS, LS2N Nantes, [isabelle.fantoni@ls2n.fr](mailto:isabelle.fantoni@ls2n.fr)  
Abdelhamid Cheiette, Assistant Professor, Centrale Nantes, [abdelhamid.chiette@ls2n.fr](mailto:abdelhamid.chiette@ls2n.fr)  
Vincent Bégoc, Researcher, Icam, [vincent.begoc@icam.fr](mailto:vincent.begoc@icam.fr)

Research

- Performed a complete analysis of quadrotor dynamics and control methods
- Analyzed aerial manipulation robots using convex analysis techniques limitations.
- Designed controllers and allocators for a novel aerial manipulation robot Flying Gripper
- Applied control and allocation methods in real-time experiments

## WORK EXPERIENCE

Nov 2017 – Today **Lab Assistant Teacher**

Employer Centrale Nantes, France

Assistant instructor for practical sessions of local robotics master and engineering students

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

Feb 2017 – Aug 2017 **Research Assistant**

Employer LS2N Nantes, France

Supervisors Damien six, LS2N Nantes, [damien.six@ec-nantes.fr](mailto:damien.six@ec-nantes.fr)  
Abdelhamid Cheiette, Assistant Professor, Centrale Nantes, [abdelhamid.chiette@ls2n.fr](mailto:abdelhamid.chiette@ls2n.fr)  
Sébastien Briot, Researcher CNRS, LS2N Nantes, [sebastien.briot@ls2n.fr](mailto:sebastien.briot@ls2n.fr)

Research

- Modeled a flying parallel robot consisting of quadrotors linked by passive links
- Conducted motion planning considering the dynamics constrain and quadrotors payload limitations.
- Applied motion planed for flying parallel robot in real-time experimentations

## EDUCATION AND TRAINING

Sep 2015 – Aug 2017 **M.Sc in Advanced Robotics**

Institution Centrale Nantes, France

Thesis Motion planning and control of a Flying Parallel Robot  
GPA: 15.3/20

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

Northwestern Polytechnical University, China  
GPA: 80.25/100

Sep 2009 – Aug 2013 **B.Eng in Detection Guidance and Control Technology**

Northwestern Polytechnical University, China

GPA: 82.91/100

## RESEARCH SKILLS

- Robotics**
- Quadrotors
  - Underactuated Hands
  - Serial and Parallel Robots
  - Humanoid Robots
  - Kinematic and Dynamic Modeling
- Control**
- Linear, Non-linear Control
  - Adaptive Control
  - Sliding Model Control
  - Model Predictive Control
- Programming**
- ROS
  - C++
  - Matlab & Simulink
  - Msc Adams
  - Linux

## 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**

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	B2	C1	B2
International English Language Testing System (IELTS) C1					
French	B1	B1	B2	B2	A2

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user  
[Common European Framework of Reference for Languages](http://europass.cedefop.europa.eu)