Curriculum vitae

PERSONAL INFORMATION

Zhongmou LI

1 Boulevard Albert Einstein, 44300 Nantes,France

zhongmou.li@ls2n.fr

zhongmouli.github.io

Date of birth 19 Jan 1990 | Nationality China

JOB APPLIED FOR

Post-doc in Aerial Manipulation Robots

EDUCATION

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

Institution: LS2N, Centrale Nantes (ec-nantes.fr), France

Subject: Theoretical developments and experimental evaluation of a novel collaborative

Supervisors: Isabelle Fantoni, Abdelhamid Cheiette,Vincent Bégoc

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

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

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, Abdelhamid Cheiette,Sébasiten Briot

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 paralle robot in real-time experimentations

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