Bingbing LI

<div align="right">**May 10, 2018**</div>

CONTACT INFORMATION	State Key Laboratory of Robotics, Shenyang Institute of Automation, Chinese Academy of Sciences, Shenyang, China

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RESEARCH INTERESTS

Unmanned Aerial Vehicle: system modeling/real-time state estimation/classical control (PID/LQR/MPC)/path planning.
System Simulation: dynamic robot simulation.
Machine Learning: detection/reinforcement learning(in dynamic environment).

EDUCATION

Shenyang Institute of Automation (SIA), **Chinese Academy of Sciences(CAS)**
Shenyang, China   Sep 2014 – now

Ph.D candidate, **State Key Laboratory of Robotics**
- Major in Pattern Recognition and Intelligent System
- Advisor: *Prof.* Jianda Han

University of Science and Technology of China(USTC), Hefei, China Sep 2013 – Jul 2014

Visiting Student, Department of Automation, School of Information Science and Technology

Xidian University, Xi'an, China   Sep 2009 – Jul 2013

B.S., School of Electronic Engineering
- Major in Intelligence Science and Technology

RESEARCH EXPERIENCE

Visiting Student   Feb 2018 – Now
CCNY Robotics Lab, **The City College of New York**, USA
Supervisor: *Prof.* Jizhong Xiao
Projects: Smart Cane for Assistive Navigation (SCAN) to help blind persons.

Research Assistant   Nov 2016 – Dec 2017
State Key Laboratory of Robotics, **Shenyang Institute of Automation (SIA)**, China
Supervisor: *Prof.* Yuqing He, Jianda Han and Jizhong Xiao(City University of New York, CUNY)
Projects: 1. Dynamic simulation system for micro UAV platform
2. Precision airdrop system for medical supply and automated battlefield casualty support
3. Simulation and experiments on coverage path planning.

Research Assistant   Sep 2014 – Oct 2016
State Key Laboratory of Robotics, **Shenyang Institute of Automation (SIA)**, China
Supervisor: *Prof.* Juntong Qi, Dalei Song and Jianda Han
Projects: 1. Visual simulation system design for Powerer Parafoil UAV (PPUAV)
2. Development of equipment for earthquake emergency search and rescue.

Research Assistant   Jun – Aug 2012
School of Electronic Engineering, Xidian University, China
Supervisor: *Prof.* Xin Yu and Licheng Jiao
Projects: Flight path planning research based on A star method.

PREPRINTS

(* means corresponding author and *Prof.* Jianda Han is my doctoral supervisor.)

1. **Bingbing Li**, Liying Yang, Yuqing He*, Jianda Han, Jizhong Xiao., "A New Modeling Scheme for Powered Parafoil Unmanned Aerial Vehicle Platforms: Theory and Experiments," *submitted to AIAA Journal of Guidance, Control and Dynamic.* (**JGCD, SCI**)

PUBLICATIONS	1. **Bingbing Li**, Liying Yang, Yuqing He, Jianda Han and Jizhong Xiao, "System Identification and Control of PPUAV," *IEEE International Conference on Cyber Technology in Automation, Control and Intelligent Systems* (**CYBER**), 2017.

1. **Bingbing Li**, Liying Yang, Yuqing He, Jianda Han and Jizhong Xiao, "System Identification and Control of PPUAV," *IEEE International Conference on Cyber Technology in Automation, Control and Intelligent Systems* (**CYBER**), 2017.

2. **Bingbing Li**, Juntong Qi, Tianyu Li, Sen Mei, Dalei Song and Jianda Han, "Energy-based controller decoupling of Powered Parafoil Unmanned Aerial Vehicle," *IEEE International Conference on Cyber Technology in Automation, Control and Intelligent Systems* (**CYBER**), 2016.

3. **Bingbing Li**, Juntong Qi, Tianyu Li, Sen Mei, Dalei Song and Jianda Han, "Real-Time Data Acquisition and Model Identification for Powered Parafoil UAV," *International Conference on Intelligent Robotics and Applications* (**ICIRA**), 2015.

4. **Bingbing Li**, Fan Liu, Juntong Qi, Sen Mei, Tianyu Lin and Jianda Han, "Transfer Functions Model Identification and Flight Test for Powered Parafoil UAV," *Chinese Control Conference* (**CCC**), 2015.

COMPETITIONS

1. 4th International UAV Innovation Grand Prix Anji, Zhejiang, China Oct 19 – 23 2016
Hosted by Aviation Industry Corporation of China(AVIC)
Bingbing Li(Team Leader), Xiangdong Meng, Zhong Liu, Bo Dai, Bin Xiao, Lilong Huang
First Prize(First Place) among 12 teams in Rotary-wing UAV groups.

2. 3th International UAV Innovation Grand Prix Anji, Zhejiang, China Oct 27 – 31 2015
Hosted by Aviation Industry Corporation of China(AVIC)
Jun Jiang(Team Leader), **Bingbing Li**, Yu Zhou, Xiangdong Meng and Xiaoguang Zhao
Second Prize(Third Place) among 12 teams in Rotary-wing UAV groups.

HONORS AND AWARDS

• Second Prize Scholarship of Xidian University,	2011, 2012
• Advanced Individual of Social Work,	2011
• First Prize Scholarship of Xidian University,	2010
• **National Scholarship** (Ministry of Education, China, **Top 2%**),	2010
• Advanced Individual of Civilized Dormitory Contribution,	2010
• Excellent Student in Xidian University (**Top 5%**),	2009, 2010

PROFESSIONAL ACTIVITIES

Conference Reviewer
- IEEE International Conference on Cyber Technology in Automation, Control, and Intelligent Systems (CYBER), Hawaii, USA   Jul 2017
- IEEE IEEE International Workshop on Advanced Robotics and its Social Impacts (ARSO), Shanghai, China   Jul 2016
- IEEE International Conference on Robotics and Automation (ICRA), Stockholm, Sweden. May 2016
- IEEE International Conference on Cyber Technology in Automation, Control, and Intelligent Systems (CYBER), Shenyang, China   Jun 2015

Oral Presentations or Posters at Conferences
- IEEE International Conference on Cyber Technology in Automation, Control, and Intelligent Systems (CYBER), Chengdu, China   Jun 2016
- Chinese Control Conference (CCC), Hangzhou, China   Jul 2015

TEACHING

- Teaching Assistant, Autonomous Control of UAV, Shenyang Institute of Automation Fall 2014, 2015

Skills

- Programming: Matlab, C/C++, Python, Linux, LaTeX, Visual Studio Code, Android Studio, Eclipse, Sublime.
- UAV control and simulation tools: Pixhawk, ROS, MAVROS, Gazebo, VREP, Flightgear.
- Machine learning tools: Keras, Tensorflow Mobile, TensorFlow.
- Machine learning tools(in study): Gym(OpenAI), Universe(OpenAI).