Seung Jae Lee

Personal Info

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Republic of Korea

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E-Mail

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Date of Birth 1988-Oct-12

1300-001-12

Web

http://www.sjlazza.com

Skills

C++

4/5

MATLAB & Simulink

4/5

ROS

3/5

CATIA

4/5

LATEX

5/5

UAV Operation (w. Manual Control)

4/5

Languages

Korean

5/5 (Native Speaker)

English

4/5

Research Interests: Multi-Rotor UAVs, Robust Control, State Estimation (w. Sensor Fusion), Disturbance Observer (DOB), Robot Platform Design & Development.

Last Update: October 12, 2019

Education

2016-03 – Seoul National University, Seoul, Republic of Korea
Ph. D. Student (2016-2018), Candidate (2018-present)
Advisor: H. Jin Kim

2014-03 – Seoul National University, Seoul, Republic of Korea
M. S. in Mechanical and Aerospace Engineering.
Advisor: H. Jin Kim

2008-03 – Hanyang University, Seoul, Republic of Korea
B. S. in Mechanical Engineering.
Advisor: Jong Hyeon Park

Major Academic Experiences

2017

International Research Intern (I2) @ NASA Ames Center Advanced Control and Evolvable Systems (ACES) Group, NASA ARC, Mountain View, CA, USA

Major Activities, Honors, Awards, Scholarships

2014 – present

2019

Multiple Industry-Academia-Government Research Projects

7 Research Participant (RP), 2 Project Manager (PM)

International Seminars

- [2018] SNU-Stanford Joint Workshop Presenter
- [2018] Seminar @ UC Berkeley Presenter

Awards

• [2018] Silver Award, Samsung Humantech Paper Awards (Prize: 11K USD)

Seung Jae Lee, Seung Hyun Kim, and H. Jin Kim, "Robust Translational Force Control of

- [2015] Silver Award, Hyundai E&C Tech. Awards (Prize: 3K USD)
- [2013] Excellence Award, Hanyang University Capstone Design Fair

Scholarships

- SNU Space Convergence Education Track Scholarship, 2017-2018
- Brain Korea 21 (BK21) Scholarship, 2014-Present
- Academic Excellence Scholarship, 2013

Major Publications

	Multi-Rotor UAV for Precise Acceleration Tracking." IEEE Transactions on Automation Science and Engineering (T-ASE), 2019
[C]	Seung Jae Lee , Dongjae Lee, and H. Jin Kim, "Cargo Transportation Strategy using T^3 -Multirotor UAV." IEEE ICRA 2019
[C]	Seung Jae Lee , Kelley E. Hashemi, Michael C. Drew, Nhan T. Nguyen, and H. Jin Kim. "Robust Gust Load Alleviation Control using Disturbance Observer for Generic Flexible Wing Aircraft in Cruising Condition." ACC 2018
[C]	Seung Jae Lee, Jaehyun Yoo and H. Jin Kim. "Design, Modeling and Control of T^3 -Multirotor: a Tilting Thruster Type Multirotor." IEEE ICRA 2018
[C]	Seung Jae Lee , and H. Jin Kim. "Autonomous Swing-Angle Estimation for Stable Slung- Load Flight of Multi-Rotor UAVs." IEEE ICRA 2017
[C]	Seung Jae Lee , Suseong Kim, Karl Henrik Johansson and H. Jin Kim. "Robust Acceleration Control of a Hexarotor UAV with a Disturbance Observer." CDC 2016
[T]	Seung Jae Lee. "Acceleration Control of a Multi-Rotor UAV with Disturbance Observer against Wind." M. S. Thesis
[C]	Seung Jae Lee and H. Jin Kim. "Control of Hexarotor Unmanned Aerial Vehicle for Outdoor Environment using Disturbance Observer." APISAT 2015
	[C] [C] [C] [C] [T]

Patents

International Patents

[Patent 1] Flight Vehicle Patent Application Number: PCT/KR2018/015715 Inventor: Seung Jae Lee and H. Jin Kim

[Patent 1] Flight Vehicle (비행체) Patent Application Number: 2018-159014 Inventor: Seung Jae Lee and H. Jin Kim

Domestic Patents (Korea)

[Patent 2]Flight Vehicle (비행체) Patent Application Number: 2017-0173277 Patent Registration Number: 1978888 Inventor: Seung Jae Lee and H. Jin Kim