# Jeonghyun Byun

#### **PHD STUDENT**

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Education \_\_ **Seoul National University** Seoul, Republic of Korea PhD Aerospace Engineering • Advisor: H. Jin Kim

**Seoul National University** 

Seoul, Republic of Korea **BS Aerospace Engineering** 2016.03.02 - 2020.02.26

2020.03.02 -

• GPA: 4.05 / 4.3

- Dissertation: Simulation of the object grabbing using a hexacopter with a 2-DOF robotic arm
- Advisor: H. Jin Kim

Publications \_\_\_

#### INTERNATIONAL JOURNALS

#### INTERNATIONAL CONFERENCES

Jeonghyun Byun<sup>1</sup>, H. Jin Kim. Robust Control of the Aerial Manipulator with a Fixed End-effector Position. 2021 20th International Conference on Control, Automation and Systems (ICCAS). Presented in Award Session

Dongjae Lee<sup>1</sup>, Inkyu Jang<sup>1</sup>, **Jeonghyun Byun**, Hoseong Seo, H. Jin Kim. Real-Time Motion Planning of a Hydraulic Excavator using Trajectory Optimization and Model Predictive Control. 2021 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS).

Jeonghyun Byun<sup>1</sup>, Dongjae Lee, Hoseong Seo, Inkyu Jang, Jeongjun Choi, H. Jin Kim. Stability and Robustness Analysis of Plug-Pulling using an Aerial Manipulator. 2021 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS).

Jeonghyun Byun<sup>1</sup>, Dongjae Lee, H. Jin Kim, Hyeonbeom Lee. On-line Parameter Estimation of a Hexacopter Equipped with 2-DOF Robotic Arm against Disturbance. 2020 20th International Conference on Control, Automation and Systems (ICCAS).

**DOMESTIC JOURNALS** 

#### **DOMESTIC CONFERENCES**

Honors_	
Awards	
2020.02	Award Certificate, Department of Aerospace Engineering, Seoul National University
2020.02	Summa Cum Laude, Seoul National University
2018.09	<b>Honorable Mention, 7th SNU Creative Design Fair</b> , College of Engineering, Seoul National University
2017.09	<b>Honorable Mention, 6th SNU Creative Design Fair</b> , College of Engineering, Seoul National University

### **FELLOWSHIPS**

2020.03 –	BK21 PLUS Doctoral Fellowship, BrainKorea21PLUS
2020.08	
2019.03 – 2020.02	Eminence scholarship, Seoul National University
2018.11	<b>KAI-KSAS Scholarship</b> , Korean Aerospace Industry & Korean Society for Aeronautical and Space Sciences
2018.03 – 2019.02	Sinyang Cultural Foundation Scholarship, Sinyang Cultural Foundation
2017.03 – 2018.02	Eminence scholarship, Seoul National University
2016.09 – 2017.02	Merit Based scholarship, Seoul National University

### Teaching Experience \_\_\_\_\_

2021.03 -	<b>Tutor, Engineering Maths 1, Seoul National University.</b> Solved some difficult problem sets
2021.06	
2020.09 -	Teaching Assistant, Introductory Engineering Probability, Seoul National University, Developed scoring
2020.12	criteria for the exams
2020.09 -	Tutor, Physics 2. Seoul National University. Solved some difficult problem sets
2020.12	
2020.03 -	<b>Teaching Assistant, Engineering Maths 1, Seoul National University.</b> Developed scoring criteria for the ex
2020.06	
2017.03 -	Tutor, Physics, Seoul National University, Solved some difficult problem sets
2018.06	

## Skills \_\_\_\_\_

**Programming:** C/C++, MATLAB

Language: Korean (native), English (proficient), French (elementary)

Tools: Git, ROS, Arduino, Fusion360, Onshape