# Won Yong Ha

wh784@nyu.edu | +1 646 719 7255 413 E 57<sup>TH</sup> St, New York City, NY

## TECHNICAL SKILLS

Languages: Python, Java, C/C++, C# Web Development: HTML, Javascript

#### **EDUCATION**

New York University, Brooklyn, NY, USA September 2019 – Present

Doctor of Philosophy in Electronic and Computer Engineering GPA: 3.61/4.00

Advisor: Professor Zhong-Ping Jiang

Cornell University, Ithaca, NY, USA January 2017 - May 2019

Master of Engineering in Systems Engineering (Concentration: Software Engineering)

Indiana University, Bloomington, IN, USA August 2014 - December 2016

Bachelor of Science in Computer Science (Concentration: Programming Languages)

Minor: Mathematics

### PROFESSIONAL EXPERIENCE

Binblur Inc, Seoul, Republic of Korea January 2023 - August 2023

Co-Founder and Software Engineer

Developed a web-based warehouse management system (WMS) connected to the autonomous storage system.

## Korea Army Consolidated Supply Depot, Sejong, Republic of Korea

April 2021 – October 2022

Military Science Researcher

- Researched and developed a storage optimization webpage using HTML/CSS and Javascript.
- Used genetic algorithm to optimize warehouse storage and published the Korea Military Science Journal research paper.
- Won first place in the Korean military science contest 2022 and introduced on press.

#### RESEARCH AND TEACHING

### Control and Network Laboratory at New York University, Brooklyn, NY, USA

Research Assistant

Transit Experimental Robotics

November 2022 - Present

- Leading a team of two Ph.D. and two master students and achieved real-world lane-changing experimental study.
- Building an experimental car robot to validate the lane-changing algorithm.
- Published a conference paper at the 26th IEEE International Conference on Intelligent Transportation Systems (ITSC 2023).

September 2019 - December 2020

- Researched and developed a system for warehouse scheduling optimization considering the collision between AGVs.
- Published a conference paper at the 20th IEEE International Conference on Advanced Robotics (ICAR 2021).
- Published a conference paper at the 19th IEEE International Conference on Automation Science and Engineering (CASE 2023).

## New York University, Brooklyn, NY, USA

September 2019 - Present

Graduate Teaching Assistant

- Assisting students and cooperating lectures with professors.
- Developing sample questions and holding office hours for extra help.
- ECE-GY6233 System Optimization Methods (30-40 Students)
- ECE-GY5253 Applied Matrix Theory (150-250 Students)
- EE4144 –Introduction to Embedded Design (50-60 Students)
- CS1114 Introduction to Programming and Problem Solving (20-30 Students)

## PUBLISHCATIONS

Won Yong Ha, et al. "Automated Lane Changing through Learning-Based Control: An Experimental Study," 2023 IEEE 26th International Conference on Intelligent Transportation Systems (ITSC), Presented.

Won Yong Ha, and Zhong-Ping Jiang. "Optimization of Cube Storage Warehouse Scheduling Using Genetic Algorithms," 2023 IEEE 19th International Conference on Automation Science and Engineering (CASE).

Won Yong Ha, Ki-yang Cho, and Chung Sik Han. "Application of Genetic Algorithms to Optimize the Storage Location of Products in Military Logistics," Journal of the Korea Institute of Military Science and Technology 25.1 (2022): 108-116.

Won Yong Ha, et al. "Optimizing the Product Locations in Automated Cube Storage Warehouse Using an Enhanced Genetic Algorithm," International Conference on Robot Intelligence Technology and Applications. Springer, Cham, 2022.

Won Yong Ha, et al. "Optimizing the Location of Products in a Warehouse Using Genetic Algorithms," 2021 International Conference on Information and Communication Technology Convergence (ICTC). IEEE, 2021.

Won Yong Ha, Leilei Cui, and Zhong-Ping Jiang. "A Warehouse Scheduling Using Genetic Algorithm and Collision Index," 2021 20th International Conference on Advanced Robotics (ICAR). IEEE, 2021.

## ACTIVITIES AND HONORS

1st Place on Military Science Contest Spring 2022 Six Sigma Certification Fall 2017 CompTia IT Fundamentals Certifications Summer 2016

Oracle Certified Professional, Java SE 6 Programmer Spring 2015

Oracle Certified Professional, Java EE 5 Web Component Developer Spring 2015