Junseo(Jason) Kim

Mekelweg 5
2628 CD Delft, Netherlands
245 Melwood Avenue.
Pittsburgh, PA, 15213, United States

+1 (412) 657-3578
J.Kim-18@student.tudelft.nl
junseoki@andrew.cmu.edu
https://kimjunseo.com/

Research Interests

Robot Learning, Manipulation, Computer Vision, SLAM, Sim2Real, Physics Simulation

Education
[†]*Note: Includes 18 months of military service*

Delft University of Technology *(TU Delft)* — 09/2024 – Present
Msc in Robotics — *Delft, Netherlands*

Toronto Metropolitan University *(Formerly Ryerson University)* — 09/2018 – 06/2024[†]
BEng in Mechanical Engineering - Mechatronics (With Distinction) — *Toronto, ON, Canada*

Research Experience

Bot Intelligence Group (BIG) - Visiting Research Scholar — 08/2025 – Present
Carnegie Mellon University, Robotics Institute - Supervised by Dr. Jean Oh — *Pittsburgh, PA, United States*

Autonomous Multi-Robots Lab — 10/2024 – Present
Delft University of Technology - Supervised by Dr. Javier Alonso-Mora — *Delft, Netherlands*

The Robotics and Computer Vision Lab (RCVL) — 04/2023 – 08/2024
Toronto Metropolitan University - Supervised by Dr. Sajad Saeedi — *Toronto, Canada*

Geometric Computing Lab — 05/2023 – 08/2024
Toronto Metropolitan University - Supervised by Dr. Yeganeh Bahoo — *Toronto, Canada*

Publications
Note: Equal Contribution, J: Journal, C: Conference, P: Preprint

[J1] M. Lisondra[*], **J.Kim**[*], G.Shimoda, K.Zareinia, and S. Saeedi *TCB-VIO: Tightly-Coupled Focal-Plane Binary-Enhanced Visual Inertial Odometry. in IEEE Robotics and Automation Letters, vol. 10, no. 12, pp. 12341-12348, Dec. 2025,* doi: 10.1109/LRA.2025.3619774.

[C2] **J.Kim**, J. Zalat, Y. Bahoo, and S. Saeedi. *Structure from WiFi (SfW): RSSI-based Geometric Mapping of Indoor Environments. in 2024 American Control Conference (ACC), Toronto, ON, Canada, 2024, pp. 259-264,* doi: 10.23919/ACC60939.2024.10644833.

[C1] M. Lisondra[*], **J.Kim**[*], R. Murai, K.Zareinia, and S. Saeedi. *"Visual Inertial Odometry using Focal Plane Binary Features (BIT-VIO)". in 2024 IEEE International Conference on Robotics and Automation (ICRA), Yokohama, Japan, 2024, pp. 1661-1668,* doi: 10.1109/ICRA57147.2024.10610838.

[P4] **J.Kim**[*], G.Dumont[*], X.Gao[*], G.Chen[*], H.Caesar, and J. Alonso-Mora. *MobileOcc: A Human-Aware Semantic Occupancy Dataset for Mobile Robots. in https://arxiv.org/abs/2511.16949* (Anonymous Conference - Double-blind Review)

[P3] **J.Kim**[*], M.Lisondra[*], Y.Bahoo, and S. Saeedi. *Inverse k-visibility for RSSI-based Indoor Geometric Mapping. in https://arxiv.org/abs/2408.07757* (Under Review at Springer Autonomous Robots)

[P2] H.Seo, S.Choi, M.Hong, Y.Zhou, **J.Kim**, L.Ismaila, N.Etori, M.Agarwal, Z.Liu, J.Kim, and J.Oh. *Exposing Blindspots: Cultural Bias Evaluation in Generative Image Models*. in https://arxiv.org/abs/2510.20042 (Anonymous Conference - Double-blind Review)

[P1] I.Mehta, **J.Kim**, S.Taghipour, and S. Saeedi. *M^3RS: Multi-agent, Multi-objective, and Multi-mode Routing and Scheduling*. in https://arxiv.org/abs/2403.16275 (Anonymous Journal - Double-blind Review)

Other Experience

Board of Studies - Master Robotics Program	10/2024 – 10/2025
Delft University of Technology	*Delft, Netherlands*
Project Sapience (Cooperative Drone Competition) - TU Delft Team	10/2024 – 07/2025
NATO Science for Peace and Security Program - Supervised by Dr. Ewoud Smeur	*Delft, Netherlands*
Undergraduate Intern in 3D printing Technology	07/2022 – 08/2022
Korea Institute of Industrial Technology (KITECH) - Supervised by Dr. Hyub Lee	*Siheung, South Korea*
Automobile Mechanics	12/2020 – 06/2022
Republic of Korea Military Army	*Cheolwon, South Korea*
Association of Korean-Canadian Scientists and Engineers - President	09/2019 – 08/2020
Toronto Metropolitan University Chapter(YG)	*Toronto, Canada*

Awards & Honors

Justus and Louise van Effen Research Grant	
Delft University of Technology - Carnegie Mellon University	*2025*
Justus and Louise van Effen Excellence Scholarship - *Fully Funded*	
Delft University of Technology	*2024 - 2026*
Gwangyang Municipal Baegun Scholarship	
Gwangyang city Baegun Scholarship Association	*2023*
Korean Canadian Scientists Scholarship Foundation Award	
The Association of Korean-Canadian Scientists and Engineers	*2023*
UIRO(Undergraduate Interdisciplinary Research Opportunities) Award	
Toronto Metropolitan University - Co-Supervised by Dr.Sajad Saeedi and Dr. Yeganeh Bahoo	*2023*
The Norman ESCH Award Stage 1	
Toronto Metropolitan University - Supervised by Dr. ChungHyuk Lee	*2023*
Dean's List	
Toronto Metropolitan University	*2019 - 2020, 2022-2024*
Solidworks certificate of Mechanical Design	
Dassault Systems	*2019*

Academic Service - Reviewer

International Conference on Robotics and Automation (ICRA): 2026
International Conference on Intelligent Robots and Systems (IROS): 2024

Relevant Skills

Programming: Python, C, C++
Frameworks & Libraries: ROS 1/2, NVIDIA Warp, NVIDIA Newton, MuJoCo, OpenCV
Tools: SolidWorks, LaTeX