

Youchan Choi

“A researcher bringing the sense of the hands that built civilization into robotics”

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Education

Sungkyunkwan University *(2025.03~2027.02)*

M.S course in Intelligent Robotics
Robotics Innovatory Laboratory under supervision of Prof. Hyouk Ryeol Choi

Sejong University *(2021.07~2024.06)*

B.S in Intelligent Mechatronics Engineering
Intelligent Robotics Laboratory under supervision of Prof. Brian Byunghyun Kang

Research Intereset

Soft robotics, Tactile sensor, Robotic hand

Research Experience

Development of Wearable Hand Robot With Intelligent Grasping Strategy Considering Characteristics of Objects *(2021.09~2024.02)*

- Developed a soft wearable hand robot capable of estimating object characteristics and fingertip force.
- Implementd a learning-based grasping strategy to enable real-time force estimation and adaptive grasp.

Intelligent Wearable Robot for Flat Back Syndrome *(2024.03~2024.06)*

- Developed an intelligent wearable robot to assist posture and movement for individual with flat back syndrome.
- Integrated sensing and control strategies to provide adaptive physical assistance.

A minimal-Sensing Fingertip Tactile Sensor for Precise Three-Axis Force and Contact-Position Estimation (Ra-L and patent in progress) *(2025.03~2026.08)*

- Propose a minimal-sensing 3 axis and contact position fingertip tactile sensor.
- Integrated tactile sensor to robotic ahnd for stable grasp control.

Extracurricular Activiries

- UR2022 Submission to academic journal as common oral presenter
- ICCAS 2023 as common oral presenter
- KROS 2025 as poster presenter

Skills

- *Altium, SolidWorks, Inventor, COMSOL, C, Python, MATLAB, LabVIEW, Unity, STM32CubeIDE*