



응용로봇연구실 Advanced Robotics Lab.

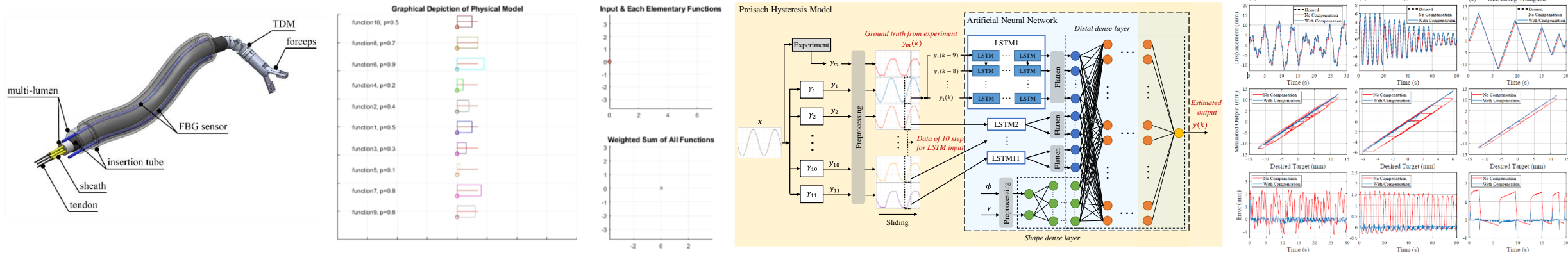
부산대학교 기계공학부

진상록 교수

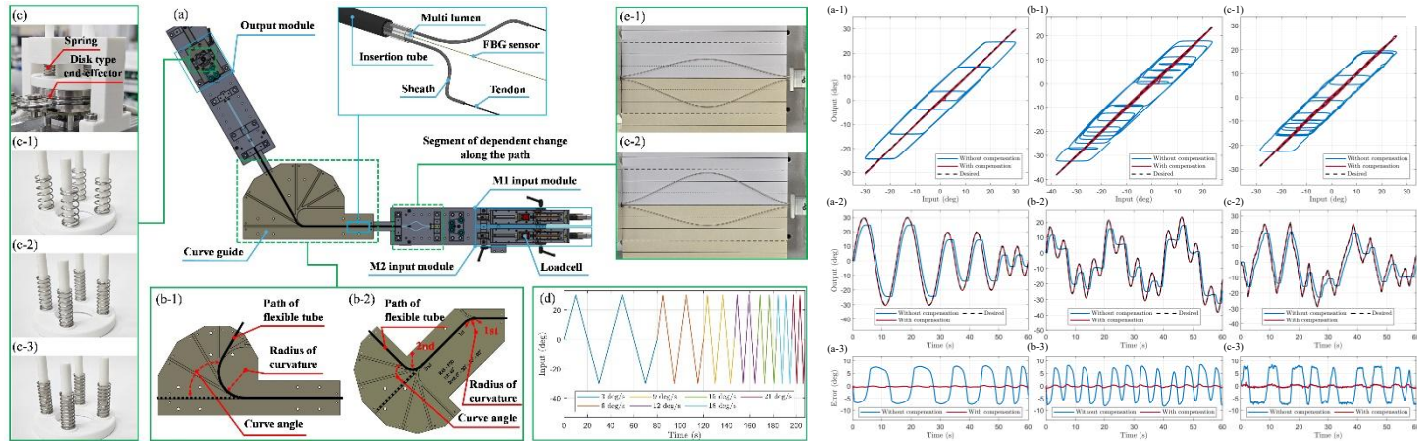
유연 내시경 로봇

[유연 내시경 로봇을 위한 텐던-쉬스 메커니즘(TSM)의 히스테리시스 모델링 및 보상]

- TSM의 형상별 히스테리시스 모델링을 위한 Preisach 모델 기반 순환 신경망(RNN)과 임의의 형상에 대한 연속 포물선 보간법을 사용한 실시간 보상 알고리즘



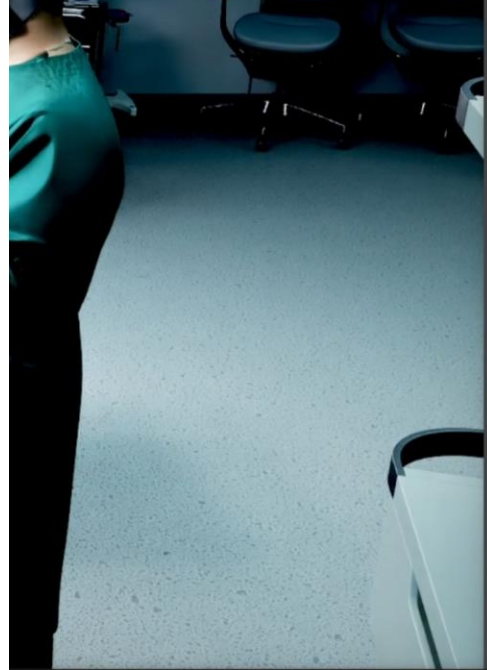
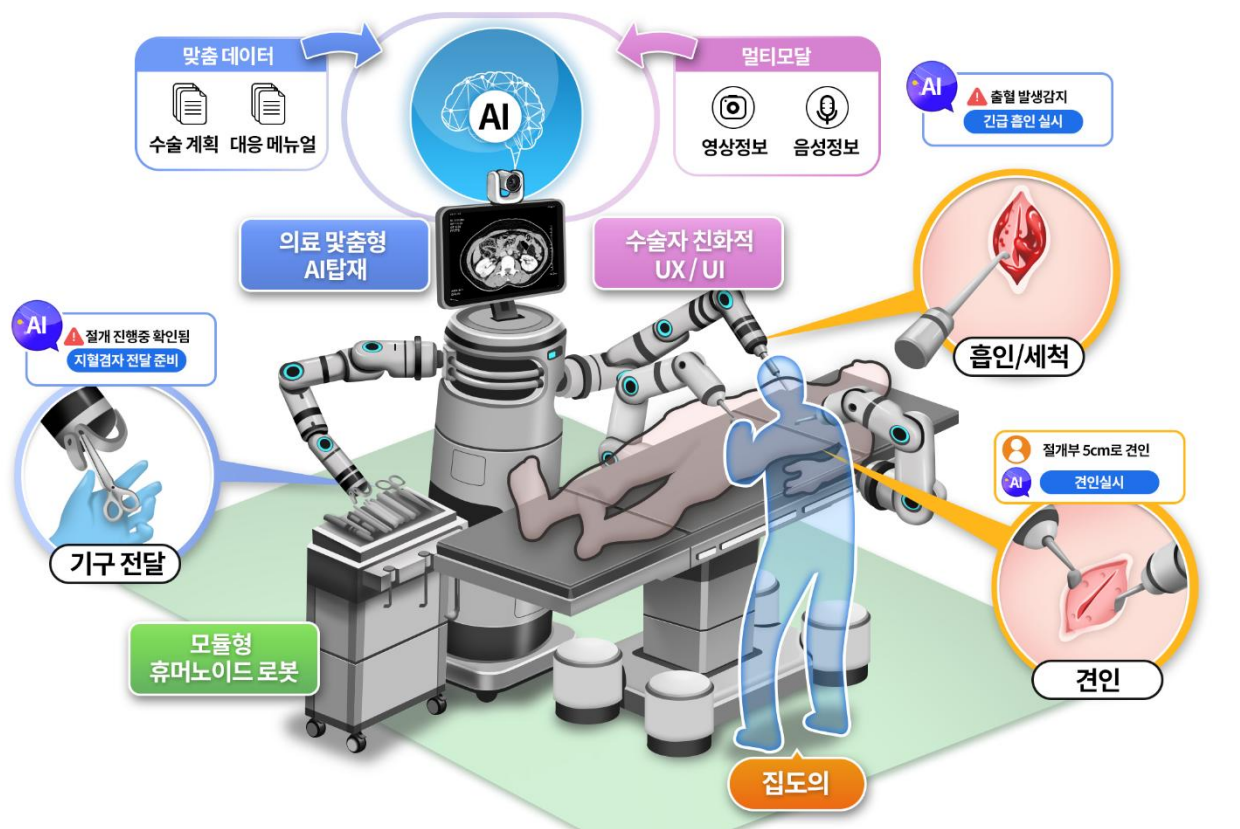
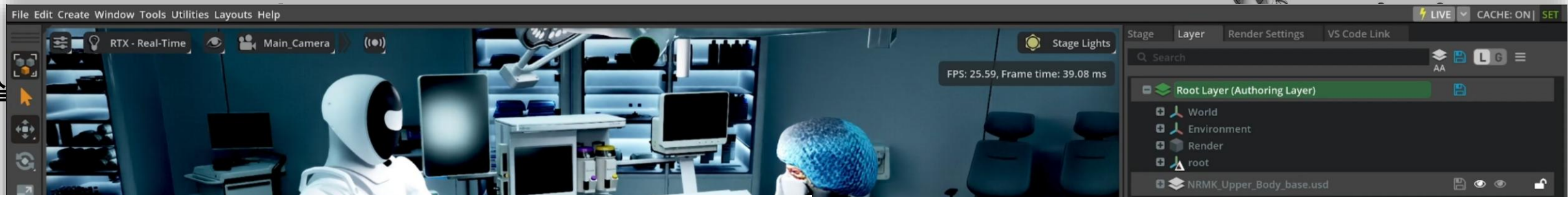
- 다양한 조건에서 장력 측정을 통한 길항적 텐던-쉬스 메커니즘의 히스테리시스 모델링 및 보상



Advanced Robotics LAB

Hysteresis compensation
- Experiment for validation -

[솔]

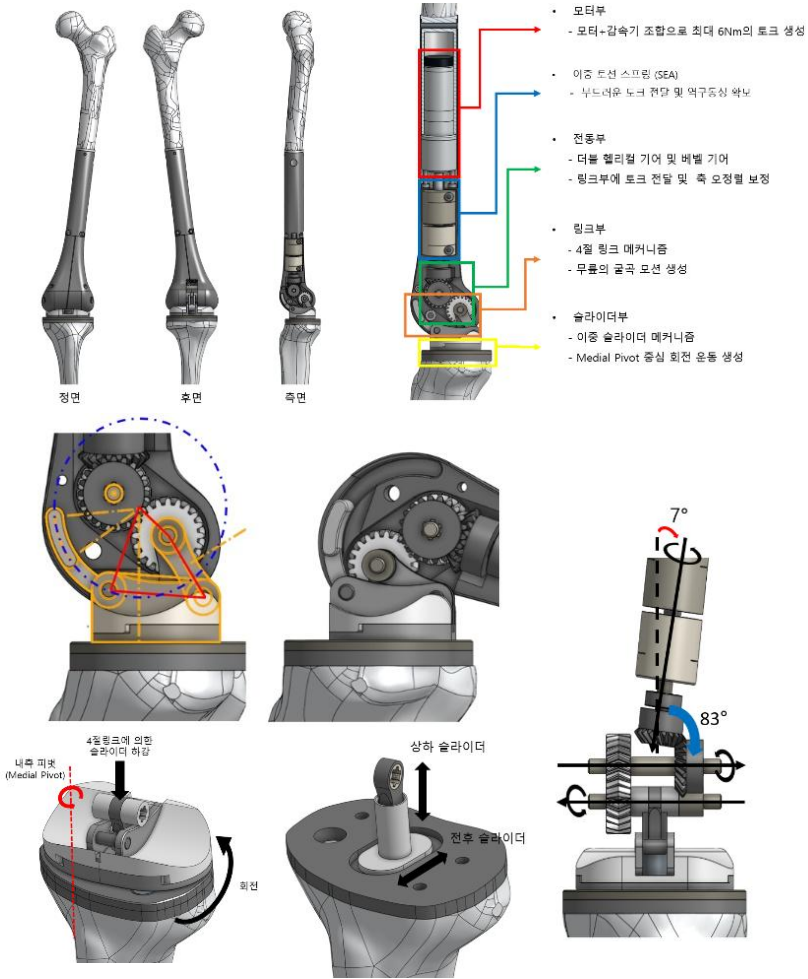


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[task_plan_executor-5] [INFO] [1763564841.023410450] [task_plan_executor]: TaskPlan executor ready. Waiting for plans...
[gpt_response_node-2] [INFO] [1763564841.165074910] [gpt_response_node]: gpt_response_node가 시작되었습니다. stt_text 토픽을 기다립니다.
[ee_gripper_controller-6] [INFO] [1763564841.171049916] [ee_gripper_controller]: EE gripper controller ready | topic=ee joint commands start=open
[pick_place_action_server-4] [INFO] [1763564841.219378986] [pick_place_action_server]: PickPlace action server ready.
[tts_player_node-3] [INFO] [1763564841.233164875] [surgical_tts_node]: surgical_tts_node가 시작되었습니다. task_plan 토픽을 기다립니다.
[push_to_talk_recorder-1] [INFO] [1763564841.418032788] [push_to_talk_recorder_node]: 대기 중... "m" 키를 누르고 있는 동안 녹음됩니다. (Ctrl+C로 종료)
[push_to_talk_recorder-1] [INFO] [1763564841.418543492] [push_to_talk_recorder_node]: Push-to-talk 녹음 스레드를 시작했습니다.
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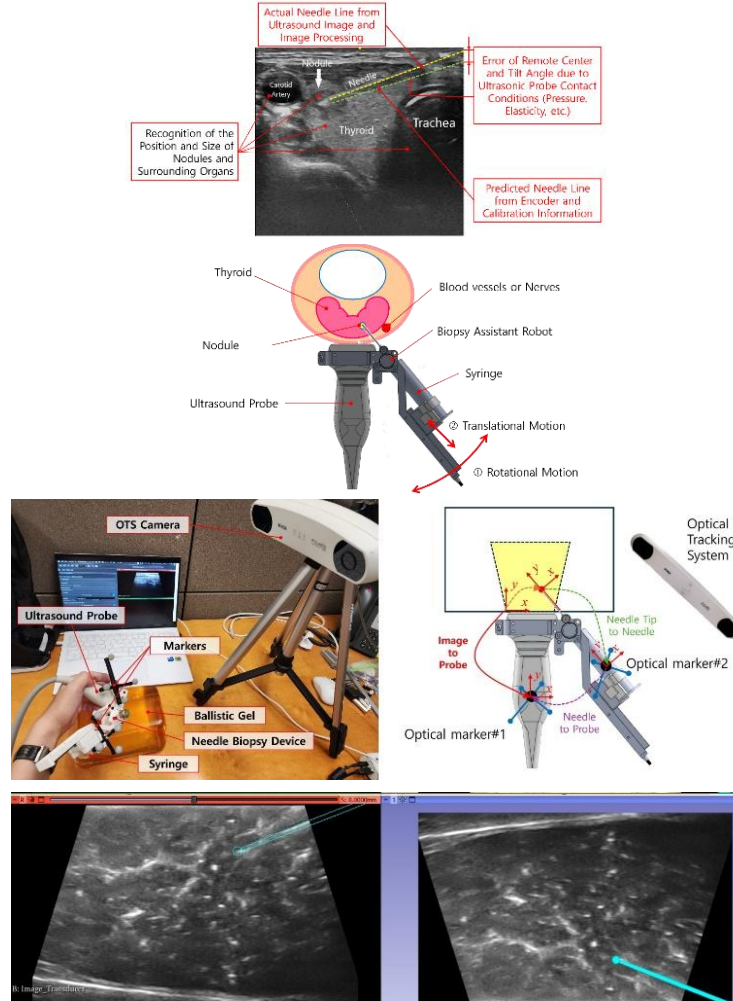


그외 의료로봇

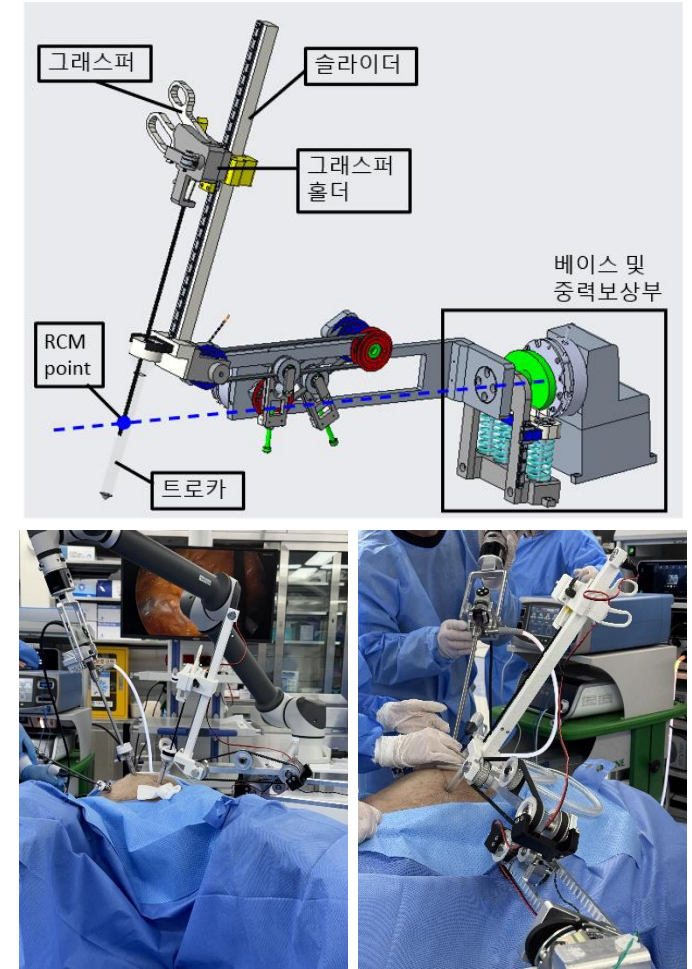
[능동형 무릎 인공관절]



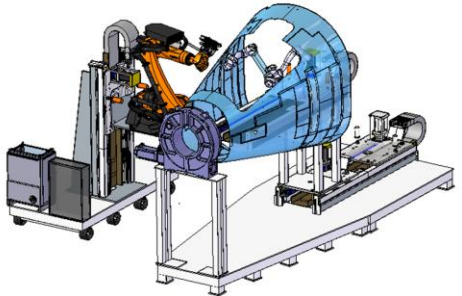
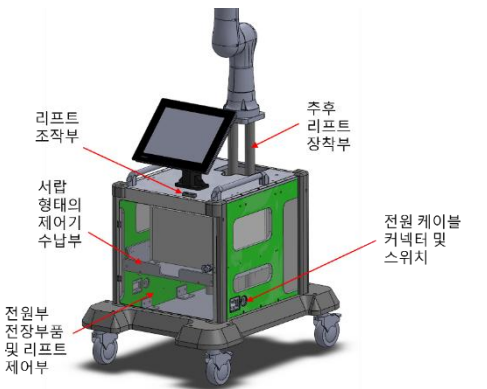
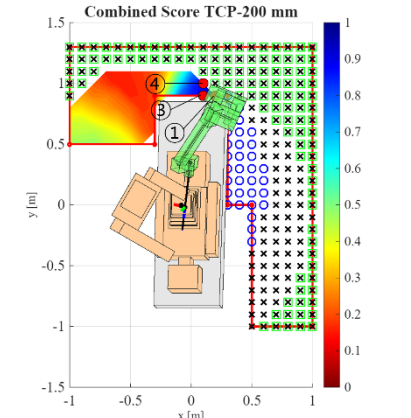
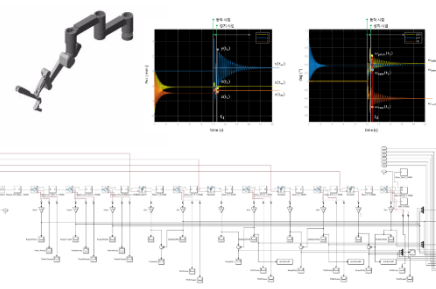
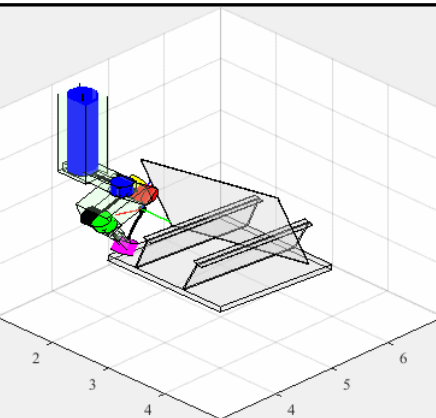
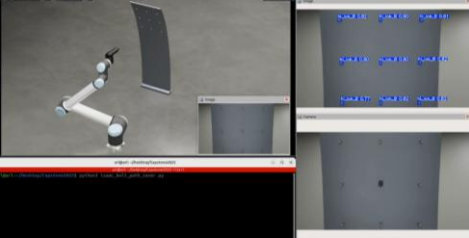
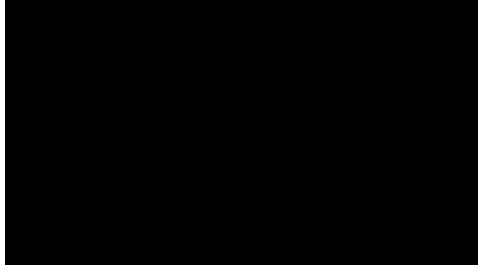
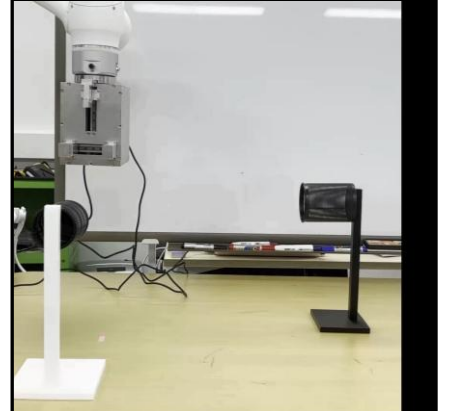
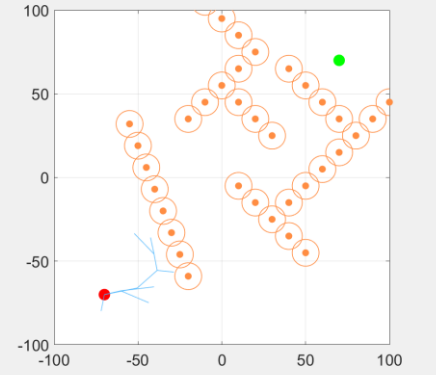
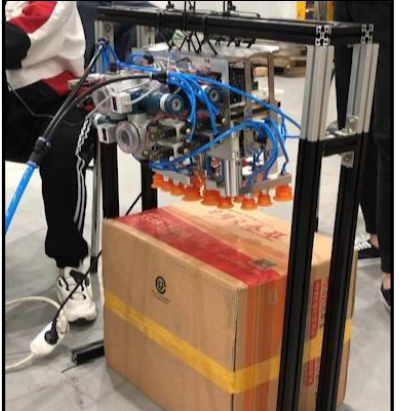
[갑상선 초음파 생검 보조기기]



[복강경 그래스퍼 수동 견인기]



산학협력

<p>항공기 동체조립 로봇 대한항공(2024-2028)</p>	<p>척추수술보조로봇 뉴로메카(2025)</p>	<p>수술보조로봇 위치 최적화 (주)이롭(2025)</p>	<p>Revo-i 수술로봇 진동 분석 미래컴퍼니(2024)</p>	<p>용접로봇 최적 경로 생성 대우조선해양(2020-2022)</p>
				
<p>자동 조립 공정 DRB오토메이션(2025)</p>	<p>LLM 기반 로봇 제어 DRB오토메이션(2024)</p>	<p>푸드테크 그립퍼 개발 DRB오토메이션(2023)</p>	<p>장애물 회피 경로 생성 DRB오토메이션(2022)</p>	<p>가변형 진공 그립퍼 개발 DRB오토메이션(2021)</p>
				

Thank you

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rokjin17@pusan.ac.kr](https://sites.google.com/view/advrobot/rokjin17@pusan.ac.kr)

