Sangbeom Park

Al Research Engineer Seoul, South Korea

🏶 park-sangbeom.github.io | 🎓 Sangbeom Park | 🖸 park-sangbeom | 🛅 sangbeompark

Work Experience_____

ATLO	Seoul, S.Korea
CTO, Full-time	Jun. 2024 – Apr. 2025
• Built a multimodal AI agent with emotion-aware dialogue generation, deployed on robot, iOS, and web pla	atforms
NAVER Cloud	Gyeonggi, S.Korea
Machine Learning Engineer, Intern	Mar. 2024 – Jun. 2024
 Developed NewsBot, a personalized news delivery system powered by <u>HyperCLOVA X</u> 	
NAVER LABS	Gyeonggi, S.Korea
Machine Learning Engineer, Intern	Mar. 2023 – Sep. 2023
 Implemented unsupervised skill learning to develop safe and diverse quadruped locomotion behaviors (M 	lentor: <u>Taeyoon Lee</u>)
Education	

Korea University

M.S. in Artificial Intelligence

- Thesis: Learning Diverse Manipulation Skills for Effective Semi-Autonomous Teleoperation
- Cumulative GPA: 4.42/4.5 | Credit: 40
- Supervisor: Sungjoon Choi

Dongguk University

B.S. in Electrical and Electronics Engineering, Minor in Intelligent Robotics Engineering

- EE GPA: 4.09/4.5 | IR GPA: 4.43/4.5 | Credit: 149
- Leave of absence for military service in KATUSA: Nov. 2016 Aug. 2018

Publications	
Quality-Diversity based Semi-Autonomous Teleoperation using Reinforcement Learning	Neural Networks
Sangbeom Park, Taerim Yoon, Joonhyung Lee, Sunghyun Park, and Sungjoon Choi	Nov. 2024
Project Page Paper Code Poster	
• Published in JCR Top 10% Journal in Computer Science, Artificial Intelligence & Neurosciences (<i>Imapct Factor: 7.8</i>)	
Presented on Physical Human-Robot Interaction at ICRA 2024 Workshop	
Visual Preference Inference: An Image Sequence-Based Preference Reasoning in Tabletop Object Manipulation	IROS
Joonhyung Lee, Sangbeom Park , Yongin Kwon, Jemin Lee, Sungjoon Choi	Oct. 2024
Project Page Paper Code Video Poster	
Presented on Vision-Language Models for Navigation and Manipulation at ICRA 2024 Workshop	
SPOTS: Stable Placement of Objects with Reasoning in Semi-Autonomous Teleoperation Systems	ICRA
Joonhyung Lee, Sangbeom Park , Jeongeun Park, Kyungjae Lee, and Sungjoon Choi	May. 2024
Project Page Paper Code Video	
CLARA: Classifying and Disambiguating User Commands for Reliable Interactive Robotic Agents	RA-L
Jeongeun Park, Seungwon Lim, Joonhyung Lee, Sangbeom Park , Minsuk Chang, Youngjae Yu, and Sungjoon Choi	Dec. 2023
Project Page Paper Code Video	

Seoul, S.Korea

Seoul, S.Korea

Sep. 2021 - Feb. 2025

Mar. 2015 - Aug. 2021

Interactive Multimodal Agent for Emotion-Aware Dialogue	ATLC
Al Research Engineer & CTO	Jun. 2024 - Apr. 2025
• Launched and operated a web-based dialogue agent service <u>Atto</u> and iOS app <u>Ditto</u> .	
Designed an asynchronous multimodal interaction pipeline.	
Implemented a RAG system using LangChain and LLMs with prompt engineering.	
• Built full-stack web and iOS apps enabling multimodal chat with the agent.	
 Secured seed funding from <u>Strong Ventures</u>. 	
Achieved 54,000+ conversation sessions in four months.	
AI News Curation System	Naver Cloud
Machine Learning Engineer & Intern	Mar. 2024 - Jun. 2024
 Built backend infrastructure with AWS, Docker, and MySQL. 	
• Generated labeled data using LLMs and fine-tuned <u>HyperCLOVA X</u> for classification.	
• Applied embedding similarity and reranking to filter and prioritize articles.	
• Deployed as a chatbot, delivering curated news to 900+ employees.	
Safe and Low-Noise Locomotion Skill Learning	NAVER LABS
Machine Learning Engineer & Intern	Mar. 2023 - Sep. 2023
 Designed a Safe Critic Network to suppress unsafe/noisy gaits. 	
 Used Hierarchical RL to learn diverse walking behaviors with safety-aware policies. 	
 Improved sim-to-real transfer via domain randomization in Isaac Gym. 	
Developed a real-time Python–C++ control pipeline using the LCM communication framework.	
• Reduced walking noise by 24%, validated in simulation and real hardware.	
Automation Maintenance using Mobile Manipulator	SAMSUNG
M.S. Research Project	Mar. 2021 - Sep. 2023
• Created simulation environments in Unity and Gazebo for autonomous maintenance tasks.	
Developed navigation and manipulation canabilities for mobile manipulators in factory settings	

Semi-Autonomous	Teleoperation via	Learning Non	-Prehensile Mani	pulation Skills
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Sangbeom Park, Yoonbyung Chai, Sunghyun Park, Jeongeun Park, Kyungjae Lee and Sungjoon Choi

• Paper | Code | Video

Projects

Learning Latent Prior for Rapid Adaptation of Legged Robots to Unexpected Amputation

Sunghyun Park, Yoonbyung Chai, Seungyup Ka, Hyeonseong Kim, Sangbeom Park, Kevin Gim, Joohyung Kim, and Sungjoon Choi

Physical Human-Robot Interaction	Yokohama, Japan
Conference Workshop	May, 2024
• Poster presentation at 2024 IEEE International Conference on Robotics and Automation (ICRA)	
Learning X in Physics-based Simulators	Seoul, S.Korea
Tech Talk	Mar. 2024

• Invited talk at CINAMON, AI Research Group

Shared-Autonomy for Robotics

Tech Talk

• Invited talk at NAVER LABS, Robot Dynamics & Control Group

2

Feb. 2023

Under Review

2025

Gyunggi, S.Korea

Telerobotics

Conference Presentation

• Oral presentation at 2022 IEEE International Conference on Robotics and Automation (ICRA)

Patent_

2023 10-2023-0125345, Semi-Autonomous Teleoperation via Learning Manipulation

Skills

Programming Python, C++, C#, Java

Physics Simulation Isaac Sim, MuJoCo, Unity, Gazebo Realworld Robots UR5e, Mini-Cheetah, Franka Panda DevOps Amazon ECS, Docker Languages Korean (Native), English (Fluent)

Korea