

TATRC Welcomes New Robotics Research Engineer to the MedRAS Division

Jaeyeon Lee, Ph.D., has joined TATRC's Medical Robotics & Autonomous Systems (MedRAS) Division as an ORISE Digital Health Fellow. His research background in robotics, coupled with his experience in developing microsurgical robot systems will assist in the improvement of the motion planning, control, and human-in-the-loop teleoperation performance of the robot systems at TATRC in order to care for the casualties on the battlefield. He will also provide knowledge about robotic assistance during surgery based on his previous collaborations with various medical professionals. His research background includes microsurgical robots, micro/nanorobots, robot haptics, and closed-loop teleoperation systems. He is particularly interested in modern AI technology for smart robot systems closely working with humans.

Dr. Lee grew up in a small town in South Korea and has loved robots since his childhood. His hobby growing up was to build robots with whatever materials he could get his hands on. He joined the Robotics Club during his

sophomore year of high school and it was that which inspired him to become a professional roboticist. After getting a Master's degree in South Korea, he embarked on a journey across the seas to continue his studies in Texas. He received his Ph.D. in the Department of Electrical Engineering from the University of Texas in 2016. He briefly joined the medical school of the University of Texas Health Science Center at Houston as a Sr. Research Associate, then later became a Sr. Control Engineer in ColubrisMX Inc. in 2017. With three years of industrial hands-on experience under his belt, he returned to the research field to conduct studies on the rapidly growing technology of robotics systems. From 2020, he conducted his research on telemedicine, microrobots, and machine learning in the Department of Biomedical Engineering at the George Washington University before joining us here at TATRC this year.

Dr. Lee believes technology makes the world a better place and saves human lives. He considers himself to be an idealist as a roboticist at times. Additionally, Jaeyeon enjoys traveling, walking, and tinkering



Dr. Jaeyeon Lee, Ph.D, Medical Robotics & Autonomous Systems (MedRAS) Division, ORISE Digital Health Fellow.

in automobile mechanics in his spare time.

TATRC is super excited to welcome Dr. Lee to the growing MedRAS Division! ■■■