



Naoki Yokoyama

Dodson Award

Ph.D. Candidate, Robotics in Electrical and Computer Engineering
Third Year ARCS Scholar

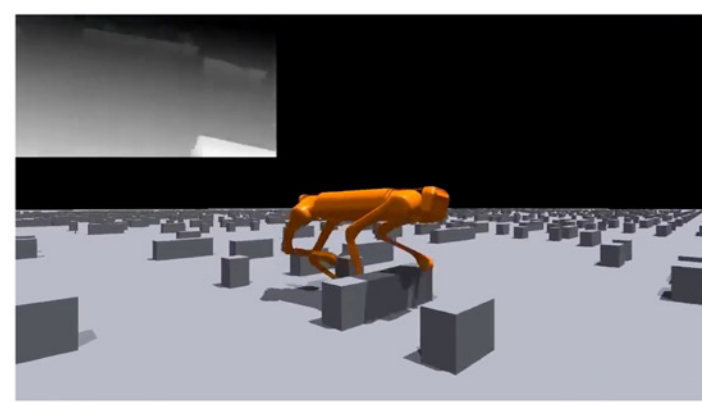
Georgia Tech



Leveraging Rapid Photorealistic Simulation for Robot Learning

My research is on developing adaptive robot learning methods that enable robots to perform complex household tasks in unstructured environments. My work focuses on creating algorithms that allow robots to generalize skills learned in simulations to real-world scenarios, making them more practical and deployable in homes to assist the elderly and disabled.

Legged navigation in cluttered environments



Learn visual locomotion and navigation separately using deep reinforcement learning

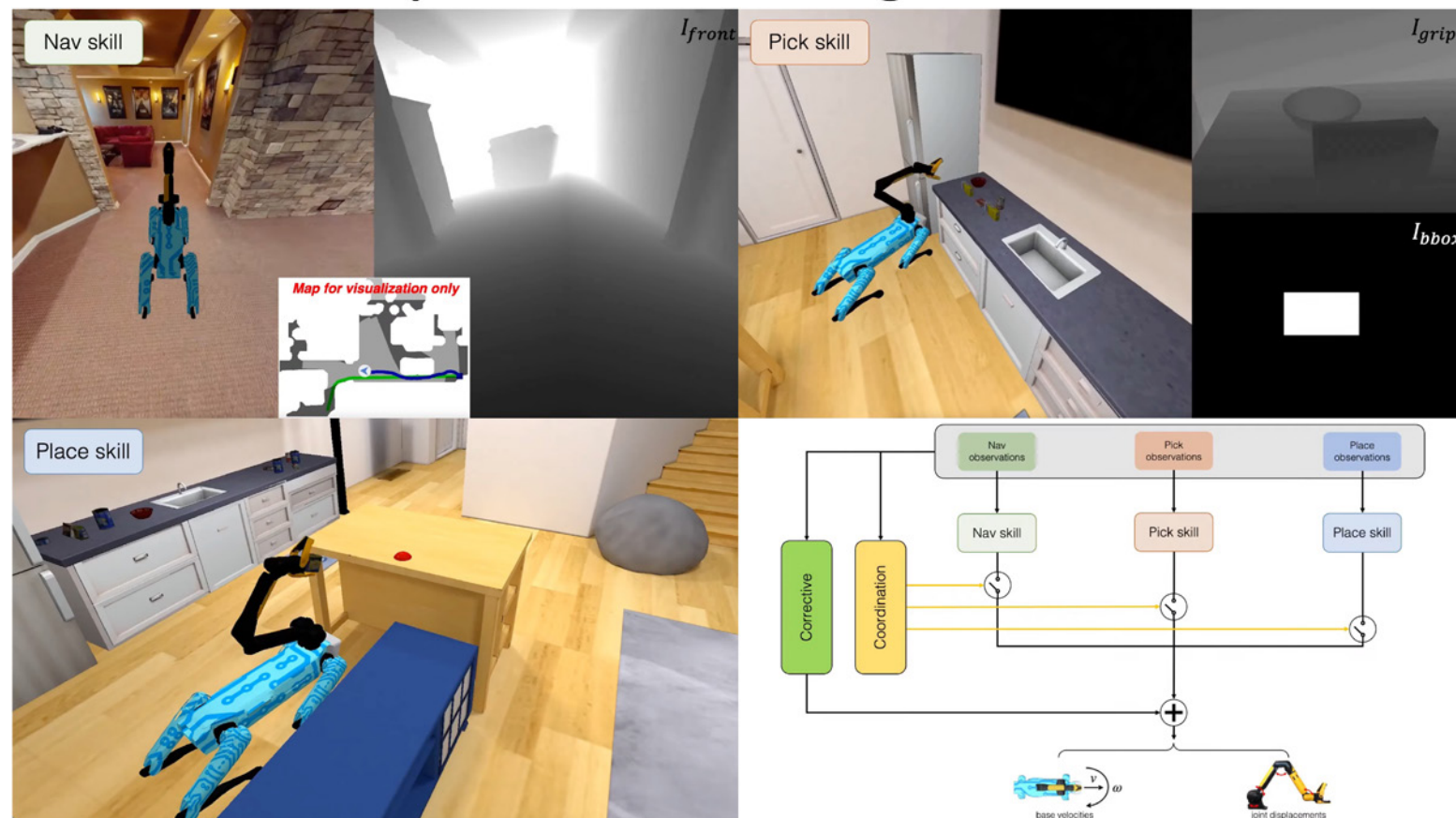


Legged navigation in cluttered environments



Couple the two together to navigate cluttered environments

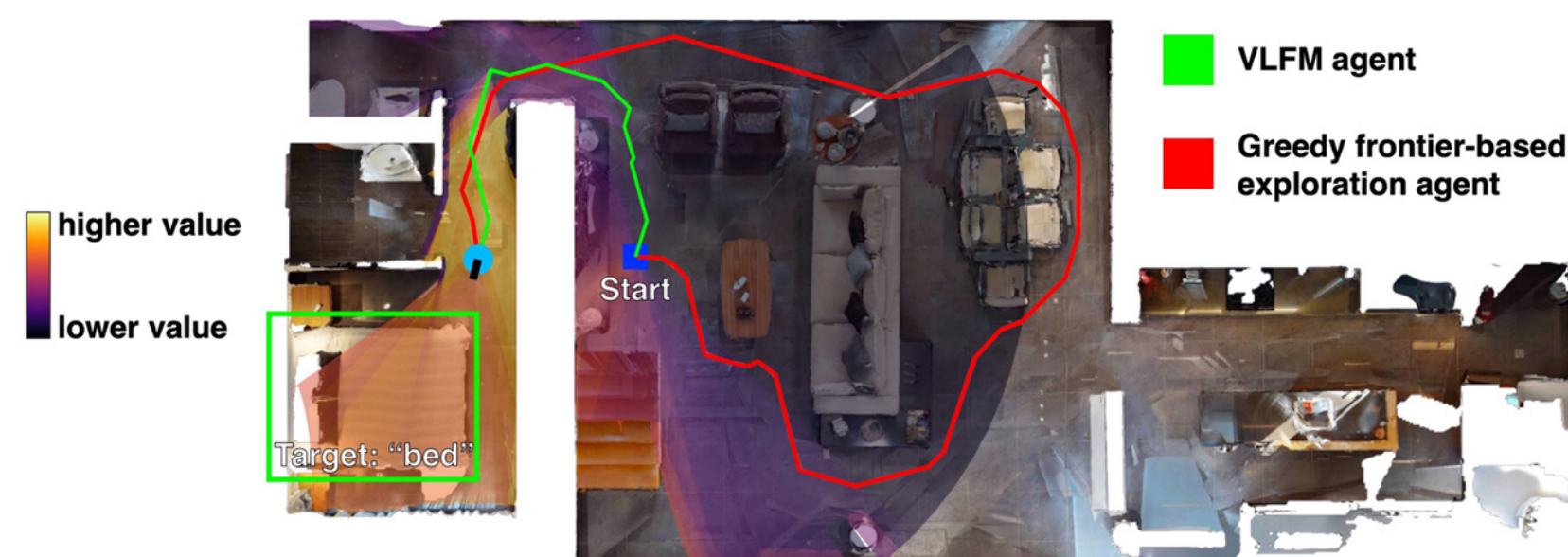
Mobile manipulation training within simulation



Real world deployment

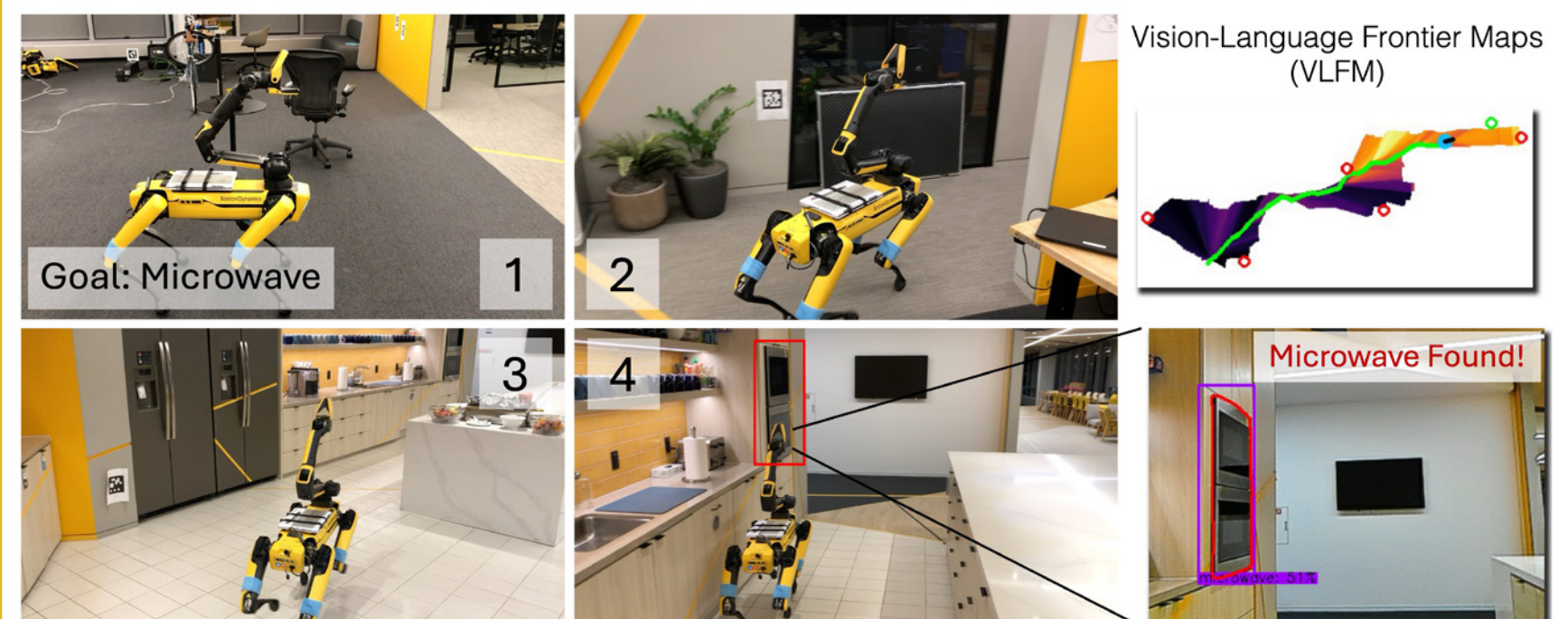


Zero-shot semantic navigation



How can we get robots to search for objects like humans do?

Zero-shot semantic navigation



How can we get robots to search for objects like humans do?