
EDUCATION

Stanford University <i>M.S. in Mechanical Engineering (Concentration in Robotics)</i>	<i>Stanford, CA</i> <i>Sep 2021 –</i> <i>GPA: 4.00/4.00</i>
University of Illinois at Urbana-Champaign <i>B.S. in Mechanical Engineering</i> <i>Minor in Electrical Engineering</i>	<i>Champaign, IL</i> <i>Graduated with Highest Honors: Dec 2019</i> <i>GPA: 3.98/4.00</i>

EXPERIENCES – ROBOTICS, SOFTWARE, ML

Stanford Vision and Learning Lab – Research Assistant <ul style="list-style-type: none">Robotics research in human-in-the-loop active reinforcement learning, brain-controlled robot systems, imitation learning of task and motion plannersExperience working with simulated and physical robots (arm and mobile manipulators), reinforcement learning, human-in-the-loop learning, imitation learning	<i>Stanford, CA</i> <i>Mar 2022 – present</i>
Computer Vision: From 3D Reconstruction to Recognition (course) <ul style="list-style-type: none">Learned traditional and deep-learning-based 3D reconstruction methodsProject: developed AR app to play a virtual piano	<i>Stanford, CA</i> <i>Jan 2022 – Mar 2022</i>
Senior Design Project – Mechatronics <ul style="list-style-type: none">Developed system to track and collect data from light-emitting objects in the skyExperience mechatronic system design (servos, encoders, Arduino, camera, OpenCV, and PID controller)	<i>Champaign, IL</i> <i>Aug 2019 – Dec 2019</i>
Research in Music Transcription <ul style="list-style-type: none">Developed adaptive particle filter to identify input piano note pitch in real time	<i>Champaign, IL</i> <i>Sep 2018 – Aug 2019</i>

EXPERIENCES - OTHER

Research in Use of Atomization-Based Cutting Fluid on Micro-Drilling <ul style="list-style-type: none">Investigated effects of cutting fluid (ACF) spray distance and angle on micro-drilling	<i>Champaign, IL</i> <i>Aug 2019 – Dec 2019</i>
Internship at Taiho Corporation of America (Manufacturing) <ul style="list-style-type: none">Modified inspection line program (ladder logic) to ensure uniform operator procedure (20% increase in inspected parts)	<i>Tiffin, OH</i> <i>Jun 2017 – Jul 2017</i>

SKILLS

- Programming languages:** Python, C++, C#, Java, MATLAB, HTML/CSS
- Robotics:** arm and mobile manipulators in simulated and physical world, ROS, RL, IL, Unity
- Miscellaneous:** 3D modeling (Creo, SolidWorks, Blender), Japanese (speak, read, write fluently)

ACTIVITIES

Game Development in Unity – Personal Project <ul style="list-style-type: none">Developing a retro-style simulation role-playing game from scratch in Unity (C#)	<i>Stanford, CA</i> <i>Jan 2020 –</i>
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PUBLICATIONS

- Lee, S.*, Hwang, M.*, Zhang, R.*, **Hiranaka, A.*** et al. NOIR: Neural Signal Operated Intelligent Robot for Everyday Activities. *CoRL*, 2023
- Hiranaka, A.***, Hwang, M.*, Lee, S., Wang, C., Fei-Fei, L., Wu, J., Zhang, R. Primitive Skill-based Robot Learning from Human Evaluative Feedback. *IROS*, 2023
- Zhang, R.*, Bansal, D.*, Hao, Y.*, **Hiranaka, A.**, Gao, J., Wang, C., Martin-Martin, R., Fei-Fei, L., Wu, J. A Dual Representation Framework for Robot Learning with Human Guidance. *CoRL*, 2022 (**Best Workshop Paper Award**)