RICHARD (HUI) LI

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OBJECTIVE

Seeking a summer internship in 2024 (No sponsorship needed)

EDUCATION

University of California, Irvine, CA — Sept. 2023 - Expected May 2025
Master of Science in Computer Science

Huazhong University of Science and Technology, Wuhan, China — Sept. 2019 - June 2023
Bachelor of Engineering in Computer Science and Technology
GPA 3.98/4.0 (**top 2%**)

EXPERIENCE

Research Intern — June - Oct. 2022
OPTML Group, Michigan State University — *East Lansing, MI*

- Proposed Smoothed Unrolling (SMUG) that systematically integrates Randomized Smoothing (RS) with the state-of-the-art model MoDL to mitigate its lack of robustness in MRI reconstruction
- Proposed a 'pre-training + fine-tuning' scheme and a novel unrolling loss to improve training effectiveness and efficiency of SMUG
- Developed SMUG in **Python** using **Pytorch** and improved the peak signal-to-noise ratio (PSNR) of MRI reconstruction by **3.1, 7.2 and 1.9 dB** on three types of robustness
- Published in ICASSP 2023 (Poster)

PROJECTS

Online To-do List — Sept. 2023 - Present

- Developing a full-stack Online To-do List using **Java**, **Spring Boot**, **MangoDB**, and **React**
- Allowing users to create, edit, and delete tasks and lists with real-time updates

RoboMaster — Sept. - Oct. 2022

- Implemented D* lite algorithm in **Python** for robot navigation
- Developed a robot-host communication system using **Robot Operating System (ROS)** and **Python**
- Utilized infrared sensor and camera on the robot to achieve autopilot in an indoor playground

Jigsaw Puzzle Game Website — Oct. - Dec. 2021

- Developed a online jigsaw game on HTML canvas using **JavaScript** with **Paper.js** graphics framework
- Implemented jigsaw tile segmentation, 'pick-drag-release' movement and assembly
- Adapted to different browsers and drag operations on PC and mobile devices
- Provided 4 types of hints, including image showing, border-only showing, tile flashing and relocating
- Proposed a novel magnet mode for fun-seeking users

SKILLS

Programming Languages	Java, Python, C, JavaScript, HTML/CSS, Verilog, Assembly
Frameworks & Databases	Pytorch, Spring Boot, MySQL, MongeDB, ROS, React
Algorithm & Data Structure	2300+ rating in LeetCode contest