Jingxi Chen

Personal website: https://codingrex.github.io/ Email: ianchen@terpmail.umd.edu

EDUCATION

University of Maryland, College Park, MD, USA
Ph.D. in Computer Science — Fall 2022 -
B.S & M.S. in Computer Science — Fall 2017 - Spring 2022

HONORS

1) Dean's Fellowship for PhD students
2) John D. Gannon Endowed Scholarship
3) Capital One Bank Dean's Scholarship Fund in Computer Science

TECHNICAL SKILLS

Programming Languages: Python, Java, C, C++, MATLAB, Ruby
Library/Software: ROS, PyTorch, OpenCV, Matplotlib, Docker, GIT, LaTeX
Skills: Learning/Physics-based Vision (Computer Vision & Computational Imaging), Neuromorphic Vision, Reinforcement Learning, Mobile Robotics.

RESEARCH PUBLICATIONS

Multi-Agent Reinforcement Learning for Visibility-based Persistent Monitoring
2021 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)
Jingxi Chen, Amrish Baskaran, Zhongshun Zhang, and Pratap Tokekar

WORKING EXPERIENCE

Robotics Software Engineer — Jun. 2021 - Aug. 2021
Brain Corp, San Diego, CA
Working in the projects for real-world robotic applications, for robots deployed in Walmart and Sam's Club.

- Working in the Shelf-Scanning team on mobile-robot information sensing tasks for real-world retail store environments
- Debugging and testing the Navigation Stack of mobile robots (Perception, SLAM, Motion Planning)

Teaching Assistant — Aug. 2018 - Sep. 2021
University of Maryland, Department of Computer Science
The responsibilities include holding office hours and developing course projects, homework, exams.

- CMSC421: Introduction to Artificial Intelligence — Spring 2021
- CMSC420: Advanced Data Structures — Spring/Fall 2020
- CMSC250: Discrete Structures — Fall 2018/19
- CMSC132: Object-Oriented Programming II — Spring 2019

SELECTED PROJECTS

* Please see the projects page on my personal website for a complete list and more details: https://codingrex.github.io/projects/

Event-based Human Detection:
A project on human detection in low-light and high-speed scenarios with event-based camera.

- Demo video: https://www.youtube.com/watch?v=RInzuru4kLc

Long-term Autonomy of Mobile Robots:
A project on exploring and solving research problems involved in the long-term autonomy for mobile robots in environments that are not designed to be robot-friendly.

- Github page: https://github.com/codingrex/Long-Term-Autonomy

Task-based Deep Optics: Evolving Robotic Eye Design:
An ongoing research project using the framework of Deep Optics to optimize the physical design of the optics (eye) for mobile robots (drones, ground robots) based on a specific task (like navigation).