

Jingxi Chen

Personal website: <https://codingrex.github.io/>

Email: ianchen@terpmail.umd.edu

EDUCATION	University of Maryland , College Park, MD, USA <i>Ph.D.</i> in Computer Science Advisor: Yiannis Aloimonos & Cornelia Fermüller <i>B.S</i> & <i>M.S.</i> in Computer Science	Fall 2022 - 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, L ^A T _E X 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 Brain Corp, San Diego, CA Working in the projects for real-world robotic applications, for robots deployed in Walmart and Sam's Club. <ul style="list-style-type: none">Working in the Shelf-Scanning team on mobile-robot information sensing tasks for real-world retail store environmentsDebugging and testing the Navigation Stack of mobile robots (Perception, SLAM, Motion Planning) Teaching Assistant University of Maryland, Department of Computer Science The responsibilities include holding office hours and developing course projects, homework, exams. <ul style="list-style-type: none">CMSC421: Introduction to Artificial IntelligenceCMSC420: Advanced Data StructuresCMSC250: Discrete StructuresCMSC132: Object-Oriented Programming II	Jun. 2021 - Aug. 2021 Aug. 2018 - Sep. 2021 Spring 2021 Spring/Fall 2020 Fall 2018/19 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/ End-to-End Optics Design Learning for Robotic Tasks: (<i>In preparation for ICCV 2023</i>): An ongoing research project using the framework of Deep Optics to learn the physical design of the imaging optics and the post-processing neural network for robotic tasks (e.g. single-shot monocular depth estimation). Microsaccade for Dynamic Vision Sensors in Robotics: (<i>In preparation for Science Robotics</i>): We are solving the fundamental problem of unstable "event features" for event cameras, we achieve this by introducing a controlled hardware-introduced motion inspired by human's microsaccade behavior [Paper Link] Event-based Human Detection: A project on learning human detection in low-light and high-speed scenarios with an event camera. <ul style="list-style-type: none">Demo video: https://www.youtube.com/watch?v=RInzuru4kLc	