# Jingxi Chen

Homepage: https://codingrex.github.io/

# Education

- The University of Maryland College Park
- Ph.D. Student in Computer Science Department

The University of Maryland - College Park

B.S. & M.S. in Computer Science

**Research** Interest

Maryland, USA Fall 2022 - 2026 (Expected) Maryland, USA Fall 2017 - Spring 2022

Email: ianchen@umd.edu

LinkedIn: Link

## • Computer Vision, Generative Modeling, 3D Vision, Robotics, Computational Imaging

#### **Publications**

Sachin Shah, Matthew Chan, Haoming Cai, Jingxi Chen, Sakshum Kulshrestha, Chahat Deep Singh, Yiannis [1]Aloimonos, Christopher Metzler, "CodedEvents: Optimal Point-Spread-Function Engineering for 3D-Tracking with Event Cameras", CVPR, 2024.

Botao He, Ze Wang, Yuan Zhou, Jingxi Chen, Chahat Deep Singh, Cornelia Fermuller, Yiannis Aloimonos,  $[\mathbf{2}]$ Chao Xu and Fei Gao, "Microsaccade-inspired Event Camera for Robotics", Science Robotics (Accepted - Technical Hold, to be released).

Vishnu Dutt Sharma, Jingxi Chen, Pratap Tokekar, "ProxMaP: Proximal Occupancy Map Prediction for [3] Efficient Indoor Robot Navigation", Accepted by IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2023. [PDF, Project]

Jingxi Chen, Amrish Baskaran, Zhongshun Zhang, and Pratap Tokekar, "Multi-Agent Reinforcement Learning [4]for Visibility-based Persistent Monitoring", Accepted by IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2021. [PDF, Talk]

## **Manuscripts**

[5] Jingxi Chen, Brandon Y. Feng, Haoming Cai, Mingyang Xie, Christopher Metzler, Cornelia Fermüller, Yiannis Aloimonos, "TimeRewind: Rewinding Time with Image-and-Events Video Diffusion", Under Review, 2024. [PDF, Project ]

Haoming Cai\*, Jingxi Chen\*, Brandon Y. Feng, Weiyun Jiang, Mingyang Xie, Kevin Zhang, Ashok [6] Veeraraghavan, Christopher Metzler, "ConVRT: Consistent Video Restoration Through Turbulence with Test-time Optimization of Neural Video Representations", arXiv, 2024. [PDF, Project]

Jingxi Chen, Botao He, Chahat Deep Singh, Cornelia Fermuller, Yiannis Aloimonos, "Active Human Pose Estimation via an Autonomous UAV Agent", Under Review, 2024. **Research Service & Awards** 

• Ph.D. Dean Fellowship\* - University of Maryland-College Park 2022 - 2023

- John D. Gannon Endowed Scholarship \*
- Capital One Bank Dean's Scholarship Fund in Computer Science \*
- Conference Reviewer ICRA 21 & 23 & 24, IROS 21
- Journal Reviewer TPAMI, TVCJ

Working Experience

## **Dolby Laboratories, Inc.**

PhD Research Intern

Sunnyvale, CA Summer 2024 (Incoming)

San Diego, CA

• Defining and executing a research project with the support of a mentor over the course of 12 weeks.

## **Brain Corp**

Robotics Software Engineer

- Jun. 2021 Aug. 2021
- 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)

Projects

- Event-based Human Detection: A Low-latency (200 fps+) and High Dynamics Range human detection demo based on event camera (DVS) Video  $\mathbf{C}$ .
- Long-term Autonomy of Mobile Robots: Setting up a mobile robot system based on TurtleBot 2 platform with Lidar and Cameras to autonomously navigate in the building hallway Web  $\mathbf{C}$ .

#### **Teaching Assistant**

- CMSC426: Computer Vision. 2022 Fall @ University of Maryland, College Park. Course Link Z.
- CMSC421: Introduction to Artificial Intelligence. 2021 Spring @ University of Maryland, College Park.
- CMSC420: Advanced Data Structures. Spring & Fall 2020 @ University of Maryland, College Park.