

# XIANGYU CHEN

PH.D. STUDENT, COMPUTER SCIENCE

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EMPLOYMENT	<b>Waymo Perception</b> <i>Software engineer</i> , Semantics Foundation Group	Jun 2024—Present
EDUCATION	<b>Cornell University</b> <i>Ph.D. Student</i> , Computer Science	Aug 2019—Jun 2024
	<b>Shanghai Jiao Tong University</b> <i>B.S. in Computer Science</i> , School of Electronics, Information and Electrical Engineering	Sep 2015—Jun 2019
PUBLICATION	<ul style="list-style-type: none"><li>- Semantic Predictive Control for Interpretable and Efficient Policy Learning Xinlei Pan*, <b>Xiangyu Chen</b>*, Qizhi Cai, John Canny, Fisher Yu <a href="#">ICRA 2019</a> [paper]</li><li>- TendencyRL: Multi-stage discriminative hints for efficient goal-oriented reverse curriculum learning Chen Wang*, Junfeng Ding*, <b>Xiangyu Chen</b>, Zelin Ye, Jialu Wang, Ziruo Cai, Shixiang Gu, Cewu Lu <a href="#">IROS 2019</a> [paper]</li><li>- Transferable Active Grasping and Real Embodied Dataset Xiangyu Chen*, Zelin Ye*, Jiankai Sun, Yuda Fan, Fang Hu, Chenxi Wang, Cewu Lu <a href="#">ICRA 2020</a> [paper]</li><li>- Train in Germany, Test in The USA: Making 3D Object Detectors Generalize Yan Wang*, <b>Xiangyu Chen</b>*, Yurong You, Li Erran Li, Bharath Hariharan, Mark Campbell, Kilian Weinberger, Wei-Lun Chao <a href="#">CVPR 2020</a> [paper]</li><li>- Low-Precision Reinforcement Learning: Running Soft Actor-Critic in Half Precision Johan Bjorck, <b>Xiangyu Chen</b>*, Christopher De Sa, Carla P. Gomes, Kilian Weinberger <a href="#">ICML 2021</a> [paper]</li><li>- Fixed Neural Network Steganography: Train the images, not the network Varsha Kishore*, <b>Xiangyu Chen</b>*, Yan Wang, Boyi Li, Kilian Weinberger <a href="#">ICLR 2022</a> [paper]</li><li>- Hindsight is 20/20: Leveraging Past Traversals to Aid 3D Perception Yurong You, Katie Luo, <b>Xiangyu Chen</b>, Junan Chen, Wei-Lun Chao, Wen Sun, Bharath Hariharan, Mark Campbell, Kilian Weinberger <a href="#">ICLR 2022</a> [paper]</li><li>- Ithaca365: Dataset and Driving Perception under Repeated and Challenging Weather Conditions Carlos Andres Diaz, Youya Xia, Yurong You, Jose Nino, Junan Chen, Josephine Monica, <b>Xiangyu Chen</b>, Katie Z Luo, Yan Wang, Marc Emond, Wei-Lun Chao, Bharath Hariharan, Kilian Q. Weinberger, Mark Campbell <a href="#">CVPR 2022</a> [paper]</li><li>- Learning To Invert: Simple Adaptive Attacks for Gradient Inversion in Federated Learning Ruihan Wu, <b>Xiangyu Chen</b>, Chuan Guo, Kilian Weinberger</li></ul>	

[UAI 2023 \[paper\]](#)

- Learning Iterative Neural Optimizers for Image Steganography

**Xiangyu Chen\***, Varsha Kishore\*, Kilian Weinberger

[ICLR 2023 \[paper\]](#)

- Waymax: An Accelerated, Data-Driven Simulator for Large-Scale Autonomous Driving Research

Cole Gulino, Justin Fu, Wenjie Luo, George Tucker, Eli Bronstein, Yiren Lu, Jean Harb, Xinlei Pan, Yan Wang, **Xiangyu Chen**, John D. Co-Reyes, Rishabh Agarwal, Rebecca Roelofs, Yao Lu, Nico Montali, Paul Mougin, Zoey Yang, Brandyn White, Aleksandra Faust, Rowan McAllister, Dragomir Anguelov, Benjamin Sapp

[NeurIPS 2023 \[paper\]](#)

- Reward Finetuning for Faster and More Accurate Unsupervised Object Discovery

Katie Z Luo\*, Zhenzhen Liu\*, **Xiangyu Chen\***, Yurong You, Sagie Benaim, Cheng Perng Phoo, Mark Campbell, Wen Sun, Bharath Hariharan, Kilian Q Weinberger

[NeurIPS 2023 \[paper\]](#)

- Box Diffusion to Refine 3D Object Detections

**Xiangyu Chen\***, Zhenzhen Liu\*, Siddhartha Datta, Katie Z Luo, Adhitya Polavaram, Yurong You, Yan Wang, Marco Pavone, Kilian Q Weinberger

[NeurIPS 2024 \[paper\]](#)

- In-vitro blood purification using tiny pinch holographic optical tweezers based on deep learning

Xiao Luo, Yu Ching Wong, **Xiangyu Chen**, Handong Tan, Weijia Wen

[Biosensors and Bioelectronics, 2025 \[paper\]](#)

- CornerPoint3D: Look at the Nearest Corner Instead of the Center

Ruixiao Zhang, Runwei Guan, **Xiangyu Chen**, Adam Prugel-Bennett, Xiaohao Cai

[International Journal of Computer Vision \[paper\]](#)

## RESEARCH EXPERIENCE

**Research Intern at University of California, Berkeley**

Jul 2018—Dec 2018

*Advisor: Prof. Trevor Darrell and Dr. Fisher Yu*

**Research Assistant at Shanghai Jiao Tong University**

Dec 2017—Jun 2019

*Advisor: Prof. Cewu Lu*

**Research Assistant at Cornell University**

Aug 2020—Present

*Advisor: Prof. Kilian Q. Weinberger*

## TEACHING EXPERIENCE

CS2110 OOP and Data Structures, Cornell University

Aug 2019—May 2020

*Teaching Assistant for Prof. David Gries*

CS358 Data Structure, Shanghai Jiao Tong University

*Teaching Assistant for Prof. Yong Yu*

Sep—Dec 2016

## INDUSTRIAL EXPERIENCE

**Research Intern, NEC Labs**

May 2020—Aug 2020

*Mentor: Pan Ji*

**Research Intern, Waymo**

May 2022—Aug 2022

*Mentor: Wenjie Luo*

**Research Intern, Waymo**

May 2023—Aug 2023

*Mentor: Yan Wang, Max Jiang, Dmitry Kalenichenko*

SERVICES

- Reviewer of CVPR 2019, 2022, 2023, 2024
- Reviewer of ECCV 2022
- Reviewer of ICLR 2025
- Reviewer of ICML 2025
- Reviewer of ICRA 2019, 2020, 2021, 2024
- Reviewer of IROS 2019
- Reviewer of NeurIPS 2023, 2024, 2025
- Reviewer of RSS 2019, 2020

HONORS  
AND  
AWARDS

Outstanding Winner (**Top 0.16%**) & Vilfredo Pareto Award (**Top 0.17%**), 2018  
National Scholarship (**Top 0.2% Nationwide**) 2018, 2017, 2016

*Last Update: June 1, 2025*