

XIANGYU CHEN

PH.D. STUDENT, COMPUTER SCIENCE

Cornell University
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EDUCATION

Cornell University

Aug 2019—Present

Ph.D. Student, Computer Science

Shanghai Jiao Tong University

Sep 2015—Jun 2019

B.S. in Computer Science, School of Electronics, Information and Electrical Engineering

University of California, Berkeley

Jul. 2018—Dec. 2018

Visiting researcher in Prof. Trevor Darrell's group, Berkeley Artificial Intelligence Research

PUBLICATION

- Semantic Predictive Control for Interpretable and Efficient Policy Learning
Xinlei Pan*, **Xiangyu Chen***, Qizhi Cai, John Canny, Fisher Yu
[ICRA 2019](#) [paper]
- TendencyRL: Multi-stage discriminative hints for efficient goal-oriented reverse curriculum learning
Chen Wang*, Junfeng Ding*, **Xiangyu Chen**, Zelin Ye, Jialu Wang, Ziruo Cai, Shixiang Gu, Cewu Lu
[IROS 2019](#) [paper]
- Transferable Active Grasping and Real Embodied Dataset
Xiangyu Chen*, Zelin Ye*, Jiankai Sun, Yuda Fan, Fang Hu, Chenxi Wang, Cewu Lu
[ICRA 2020](#) [paper]
- Train in Germany, Test in The USA: Making 3D Object Detectors Generalize
Yan Wang*, **Xiangyu Chen***, Yurong You, Li Erran Li, Bharath Hariharan, Mark Campbell, Kilian Weinberger, Wei-Lun Chao
[CVPR 2020](#) [paper]
- Low-Precision Reinforcement Learning: Running Soft Actor-Critic in Half Precision
Johan Bjorck, **Xiangyu Chen***, Christopher De Sa, Carla P. Gomes, Kilian Weinberger
[ICML 2021](#) [paper]
- Fixed Neural Network Steganography: Train the images, not the network
Varsha Kishore*, **Xiangyu Chen***, Yan Wang, Boyi Li, Kilian Weinberger
[ICLR 2022](#) [paper]
- Hindsight is 20/20: Leveraging Past Traversals to Aid 3D Perception
Yurong You, Katie Luo, **Xiangyu Chen**, Junan Chen, Wei-Lun Chao, Wen Sun, Bharath Hariharan, Mark Campbell, Kilian Weinberger
[ICLR 2022](#) [paper]
- Ithaca365: Dataset and Driving Perception under Repeated and Challenging Weather Conditions
Carlos Andres Diaz, Youya Xia, Yurong You, Jose Nino, Junan Chen, Josephine Monica, **Xiangyu Chen**, Katie Z Luo, Yan Wang, Marc Emond, Wei-Lun Chao, Bharath Hariharan, Kilian Q. Weinberger, Mark Campbell
[CVPR 2022](#) [paper]
- Learning To Invert: Simple Adaptive Attacks for Gradient Inversion in Federated Learning
Ruihan Wu, **Xiangyu Chen**, Chuan Guo, Kilian Weinberger
[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
Under submission to [ECCV 2024](#)

RESEARCH
EXPERIENCE

- | | |
|--------------------------------------------------------------|-------------------|
| Research Intern at University of California, Berkeley | Jul 2018—Dec 2018 |
| <i>Advisor: Prof. Trevor Darrell and Dr. Fisher Yu</i> | |
| Research Assistant at Shanghai Jiao Tong University | Dec 2017—Jun 2019 |
| <i>Advisor: Prof. Cewu Lu</i> | |
| Research Assistant at Cornell University | Aug 2020—Present |
| <i>Advisor: Prof. Kilian Q. Weinberger</i> | |

TEACHING
EXPERIENCE

- | | |
|-----------------------------------------------------|-------------------|
| CS2110 OOP and Data Structures, Cornell University | Aug 2019—May 2020 |
| <i>Teaching Assistant for Prof. David Gries</i> | |
| CS358 Data Structure, Shanghai Jiao Tong University | |
| <i>Teaching Assistant for Prof. Yong Yu</i> | |
| | Sep—Dec 2016 |

INDUSTRIAL
EXPERIENCE

- | | |
|---------------------------------------------------------|-------------------|
| Research Intern, NEC Labs | May 2020—Aug 2020 |
| <i>Mentor: Pan Ji</i> | |
| Research Intern, Waymo | May 2022—Aug 2022 |
| <i>Mentor: Wenjie Luo</i> | |
| Research Intern, Waymo | May 2023—Aug 2023 |
| <i>Mentor: Yan Wang, Max Jiang, Dmitry Kalenichenko</i> | |

SERVICES

- Reviewer of ICRA 2019, 2020, 2021, 2023
- Reviewer of RSS 2019
- Reviewer of CVPR 2019 Workshop on Autonomous Driving
- Reviewer of IROS 2019
- Reviewer of CVPR 2022, 2023, 2024
- Reviewer of ECCV 2022
- Reviewer of NeurIPS 2023
- Reviewer of ICLR 2024

HONORS
AND
AWARDS

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