Zhihang Zhong

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Education

- **The University of Tokyo** — Tokyo, JP
  Ph.D., Department of Computer Science (GPA: 4.00/4.00) — Sep. 2020 - Sep. 2023
- **The University of Tokyo – IME Program** — Tokyo, JP
  M.E., Department of Precision Engineering (GPA: 3.93/4.00) — Oct. 2018 - Sep. 2020
- **Zhejiang University – Chu Kochen Honors College (top 5%)** — Hangzhou, CN
  B.E., Department of Mechatronics Engineering (GPA: 3.84/4.00) — Sep. 2014 - Aug. 2018

Relevant courses: computer vision, computational photography, machine/deep learning, HCI, robotics

Skills

- **Programming:** Python, C/C++, Matlab, LaTeX
- **Tools:** PyTorch, TensorFlow, OpenCV, Qt/PyQt, SQLite, Arduino, STM32

Research Experiences

- **Visual Computing Group, Microsoft Research Asia** — Beijing, CN
  JEM intern, supervised by Han Hu, Yuhui Yuan and Ji Li — Apr. 2021 - now
  - Project: aesthetic-aware image smart cropping.
- **Visual Computing Group, Microsoft Research Asia** — Beijing, CN
  D-CORE intern, supervised by Steve Lin, Zhirong Wu and Xiao Sun — Sep. 2021 - Mar. 2022
  - Project: multi-modal blur decomposition.
- **The University of Tokyo & National Institute of Informatics** — Tokyo, JP
  Ph.D. candidate, supervised by Imari Sato and Yinqiang Zheng — Sep. 2020 - present
  - Project: joint tasks among video deblurring, interpolation, and rolling shutter correction.
- **Image Research Lab, Tokyo Research Center, Huawei** — Tokyo, JP
  Intern, supervised by Bo Zheng and Ye Gao — Aug. 2019 - Aug. 2020
  - Project: efficient video deblurring and real-world dataset collection.
- **Research into Artifacts, Center for Engineering, The University of Tokyo** — Tokyo, JP
  M.E., supervised by Jun Ota — Sep. 2018 - Aug. 2020
  - Project: automatic nursing skill assessment based on body sensor network.
- **State Key Lab of Fluid Power & Mechatronic Systems, Zhejiang University** — Hangzhou, CN
  B.E., supervised by Xin Li — Aug. 2017 - Jun. 2018
  - Project: ultra-wide-band tracking system for wall-climbing robots.

Publications

Conferences

- **Zhihang Zhong**, Xiao Sun, Zhirong Wu, Yinqiang Zheng, Stephen Lin, Imari Sato: "Animation from Blur: Multi-modal Blur Decomposition with Motion Guidance." Proceedings of the European Conference on Computer Vision, **ECCV 2022**.
- **Zhihang Zhong**, Mingdeng Cao, Xiao Sun, Zhirong Wu, Zhongyi Zhou, Yinqiang Zheng, Stephen Lin, Imari Sato: "Bringing Rolling Shutter Images Alive with Dual Reversed Distortion." Proceedings of the European Conference on Computer Vision, **ECCV 2022 (Oral, top 2.7%)**.
- Yusheng Wang, Yunfan Lu, Ye Gao, Lin Wang, **Zhihang Zhong**, Yinqiang Zheng, Atsushi Yamashita: "Efficient Video Deblurring Guided by Motion Magnitude." Proceedings of the European Conference on Computer Vision, **ECCV 2022**.

- Mingdeng Cao, **Zhihang Zhong**, Yanbo Fan, Jiahao Wang, Yong Zhang, Jue Wang, Yujiu Yang, Yinqiang Zheng: "Towards Real-World Video Deblurring by Exploring Blur Formation Process." Proceedings of the European Conference on Computer Vision, **ECCV 2022 AIM Workshop**.
- Mingdeng Cao, **Zhihang Zhong**, Jiahao Wang, Yinqiang Zheng, Yujiu Yang: "Learning Adaptive Warping for Real-World Rolling Shutter Correction." Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition, **CVPR 2022**.
- **Zhihang Zhong**, Yinqiang Zheng, Imari Sato: "Towards Rolling Shutter Correction and Deblurring in Dynamic Scenes." Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition, **CVPR 2021**.
- **Zhihang Zhong**, Ye Gao, Yinqiang Zheng, Bo Zheng: "Efficient Spatio-Temporal Recurrent Neural Network for Video Deblurring." Proceedings of the European Conference on Computer Vision, **ECCV 2020 (Spotlight, top %5)**.
- **Zhihang Zhong**, Chingszu Lin, Taiki Ogata, Jun Ota: "Multi-attention Deep Recurrent Neural Network for Nursing Action Evaluation Using Wearable Sensor." Proceedings of the 25th International Conference on Intelligent User Interfaces, **IUI 2020**.

Journals

- **Zhihang Zhong**, Chingszu Lin, Masako Kanai-Pak, Jukai Maeda, Yasuko Kitajima, Mitsuhiro Nakamura, Noriaki Kuwahara, Taiki Ogata, Jun Ota: "Multistream Temporal Convolutional Network for Correct/Incorrect Patient Transfer Action Detection Using Body Sensor Network." IEEE Internet of Things Journal, **IoTJ 2021**.

Services

- Program Committee/Reviewers: CVPR, ECCV, ACCV, BMVC, TPAMI, IJCV, TCSVT

Fellowships & Awards

- Research Fellowship for Young Scientists (200,000 Yen/Month; Research grant: up to 1,500,000 Yen/Year), JSPS DC, Apr.1st, 2023 - Mar.31st 2025
- Fellowship for Creation of Intelligent World (180,000 Yen/Month; Research grant: 340,000 Yen/Year), The University of Tokyo, Apr.1st, 2021 - Sep.30th 2023
- Microsoft Research Asia D-CORE 2021 Fellowship (10,000 $), Nov. 17, 2020
- Excellent Master Thesis Award, Department of Precision Engineering, School of Engineering, The University of Tokyo, 2020.
- Monbukagakusho Honors Scholarship (48,000 Yen/Month), JASSO, Oct.1st 2018 - Mar.31st 2019.
- Master Kong Dream Scholarship (900,000 Yen), 2017.