# YICHAO CAI

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#### **EDUCATION**

PhD, The University of Adelaide	2023 - Present
Major: Computer Science	$Adelaide,\ Australia$
Supervisors: Prof. Javen Qinfeng Shi, Dr. Zhen Zhang, Dr. Yuhang Liu	
M.S. in Engineering, Wuhan University of Technology	2016 - 2019
Major: Instrument Science and Technology, GPA 90/100	Wuhan, China
Supervisor: Prof. Zhou Xiao	
B.Eng., Wuhan University of Technology	2012 - 2016
Major: Measurement and Control Technology & Instruments	Wuhan, China
EXPERIENCE	

#### $\mathbf{E}$

Algorithm Engineer Autocity (Shenzhen) Autonomous Driving	Shenzhen, China
Algorithm Engineer Tellhow Sci-Tech Co., Ltd	2020 - 2022 Nanchang, China
Software Engineer	2019 - 2020
Huawei Technologies Co., Ltd	Dongguan, China
Visiting Student	May - Oct., 2018
California PATH, University of California, Berkeley	Richmond, USA

#### **HONORS & AWARDS**

The Award for Outstanding Graduates, issued by Wuhan University of Technology, 2019 The Award for Merit Graduate Students, issued by Wuhan University of Technology, 2017

#### RESEARCH INTERESTS

Causal Representation Learning, Machine Learning, Computer Vision

## **LANGUAGES**

Chinese (native proficiency): Capable of reading, writing, speaking, and conducting peer reviews. English: Proficient in reading, writing, speaking, and conducting peer reviews.

## **PUBLICATIONS**

## **Journals**

Yichao Cai\*, Dachuan Li\*, Xiao Zhou and Xingang Mou, "Robust Drivable Road Region Detection for Fixed-Route Autonomous Vehicles Using Map-Fusion Images", Sensors, 2018, 18(12): 4158. (\* Equal contribution)

## Conferences

Yichao Cai, Kejun Ou, Dachuan Li, Yuanfang Zhang, Xiao Zhou and Xingang Mou. "Robust Real-Time Curb Detection for Autonomous Sanitation Vehicles", 2023 IEEE International Conference on Unmanned Systems (ICUS). IEEE, 2023.

Yichao Cai, Xiao Zhou, Dachuan Li, Yifei Ming and Xingang Mou, "Head Pose Estimation with Neural Networks from Surveillant Images", Eleventh International Conference on Machine Vision (ICMV 2018). Vol. 11041. SPIE, 2019.

Xingang Mou, Conglin Leng, Xiao Zhou and **Yichao Cai**, "State Recognition of Electric Control Cabinet Switches Based on CNNs", 2018 IEEE 3rd International Conference on Image, Vision and Computing (ICIVC). IEEE, 2018.

# **Preprints**

Yichao Cai, Yuhang Liu, Zhen Zhang and Javen Qinfeng Shi, "CLAP: Isolating Content from Style through Contrastive Learning with Augmented Prompts", arXiv preprint arXiv:2311.16445 (2023).

## REFERENCES

References available upon request.