PHD CANDIDATE @ MATHSYS CDT, UNIVERSITY OF WARWICK

Yiming Ma

PROFILE

As a PhD candidate at the Mathematics for Real-World Systems Centre for Doctoral Training at the University of Warwick, my research focuses on multimodality in computer vision and its applications, such as crowd counting and driver monitoring systems. I am passionate about bridging mathematics and deep learning to solve real-world problems.

PUBLICATIONS

- Y. Ma, V. Sanchez and T. Guha, "FusionCount: Efficient Crowd Counting Via Multiscale Feature Fusion," 2022 IEEE International Conference on Image Processing (ICIP), Bordeaux, France, 2022, pp. 3256-3260, doi: 10.1109/ ICIP46576.2022.9897322.
- Y. Ma, V. Sanchez, S. Nikan, D. Upadhyay, B. Atote and T. Guha, "Robust Multiview Multimodal Driver Monitoring System Using Masked Multi-Head Self-Attention," 2023 IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPRW), Vancouver, BC, Canada, 2023, pp. 2617-2625, doi: 10.1109/CVPRW59228.2023.00260.

EXPERIENCE

RESEARCH ASSISTANT, FORD; COVENTRY, UK - 2021-2023

This research projects aims to build an intelligent interior sensing systems for monitoring and recognising drivers' activities from heterogeneous multi-view, multimodal data.

EDUCATION

PH.D. IN MATHEMATICS OF SYSTEMS, UNIVERSITY OF WARWICK; COVENTRY, UK – 2021 - PRESENT

Supervisors: Dr. <u>Victor Sanchez</u> & Dr. <u>Tanaya Guha</u>.

MSC IN MATHEMATICS OF SYSTEMS UNIVERSITY OF WARWICK; COVENTRY, UK – 2020 - 2021

Research: Prediction of Oestrus Intervals for Guide Dogs (supervisor: Prof. <u>Colm Connaughton</u>); Digital Twins of Urban Crowds (supervisors: Dr. <u>Victor Sanchez</u> & Dr. Tanaya Guha).

BSC IN MATHEMATICS AND APPLIED MATHEMATICS, SOUTHERN UNIVERSITY OF SCIENCE AND TECHNOLOGY, SHENZHEN, CHINA – 2016 - 2020

SKILLS

- Proficient in Python programming, with experience using PyTorch for research.
- Native Chinese speaker and fluent in English.