Curriculum Vitae

Kang Tang (He/Him/His)

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EDUCATION

Southern University of Science and Technology

Shenzhen, China

M. Eng., Intelligent Manufacturing and Robotics. GPA: 3.64/4.00 (4/51, 10%)

Jun. 2024 (Expected)

• Core courses: Intelligent Data Analysis (A-), Matrix Analysis (A-), Fundamental of Information Technology (A+), Theory and Practice of Innovative Design (A), Continuum Mechanics (A+), Optimization in Engineering (B).

Southern University of Science and Technology

Shenzhen, China

B. Eng., Mechanical Engineering.

Jun. 2019

PROJECT & RESEARCH EXPERIENCE

Southern University of Science and Technology

Shenzhen, China

Advisor: <u>Prof. Yongsheng Ma</u>

Sep. 2022 – May 2023

Research project. Event camera-based simultaneous localization and mapping (SLAM) and development of LiDAR

Southern University of Science and Technology

Shenzhen, China

Advisor: Prof. He Kong & Prof. Sheng Xu

Feb. 2023 – Jun. 2024 (Expected)

M. Eng Thesis: Optimal sensor placement in source localization and tracking

University at Buffalo, SUNY & University of North Carolina at Charlotte

Buffalo, NY & Charlotte, NC

Advisor: Prof. Hongfei Xue

May 2023 – Jun. 2024 (Expected)

Intern. mmWave-based human sensing systems using deep learning tools

PUBLICATIONS

- A first author paper submitted to IEEE Radar Conference (2024). "Optimal Sensor Placement Using Combinations of Hybrid Measurements for Source Localization" (under review).
- A first author paper submitted to IEEE Signal Processing Letters. "Optimal Sensor Placement Using Decentralized TDOA System in Target Localization" (under review).
- A first author paper to be submitted to IEEE Transactions on Vehicular Technology. "Frame Theory for Optimal Sensor Placement Using 3D Hybrid RSS-TOA-AOA Measurements in Source Localization".
- Chinese patent. A Type of Novel LiDAR (Chinese patent No. CN219609222U).

RESEARCH INTERESTS

- Mobile Robotics, Wireless Networks, State Estimation
- Human Sensing, Intelligent Wireless Sensing Systems, Machine Learning
- Inverse Problem, Optimization Theory, Allocation and Decision.

SKILLS

Programming: Python, Pytorch, Matlab, C++, Linux

Mathematics: Matrix theory, Probability theory, Optimization Theory

Engineering: 3D Printing, 3D Digital Model Construction, Mechanics Simulation

AWARDS

- Second prize. China Undergraduate Mathematical Contest in Modeling (2017,2018)
- Third prize. Formula Students Electrical China (2017, 2018)
- Third prize. Capstone in the College of Engineering (2019)