

MOZI CHEN

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EMPLOYMENT

Wuhan University of Technology, Wuhan, P.R. China

March 2021 - Present

Associated Research Professor in School of Navigation

EDUCATION

Wuhan University of Technology, Wuhan, P.R. China

September 2016 - July 2020

Ph.D, School of Navigation

Advisor: Prof. Kezhong Liu

The University of Texas at Dallas, Richardson, TX, USA

November 2017 - November 2018

Visiting Ph.D Student, Department of Computer Science.

Advisor: Cong Liu

Wuhan University of Technology, Wuhan, P.R. China

September 2013 - June 2016

M.S. in School of Navigation

Hubei University of Technology, Wuhan, P.R. China

September 2009 - June 2013

Bachelor, School of Electronic Engineering.

RESEARCH INTERESTS

Cyber-Physical Systems, in particular, wireless indoor localization, RF-based activity sensing and emergency navigation.

Intelligent Transportation System, in particular, wireless ship networking and ship AIS(Automatic Identification System) data analytics.

GRANTS / PROJECTS

- Project title: **Research on Wireless Indoor Localization Methods towards Shipboard Dynamic Environments**
Funding organization: National Natural Science Foundation of China (NSFC)
Principal and co-investigator(s) as listed on title page: Mozi Chen (Co-investigator)
Start date - stop date: 01/01/2020 - 12/31/2023
- Project title: **Differentiated-Services-Oriented Event Detection Based on Node Collaborative Scheme in Maritime Surveillance Sensor Networks**
Funding organization: National Natural Science Foundation of China (NSFC)
Principal and co-investigator(s) as listed on title page: Mozi Chen (Co-investigator)
Start date - stop date: 01/01/2012 - 12/31/2016
- Project title: **Research on Inland River Passengers' Position Perception and Emergency Evacuation Methods**
Funding organization: Major Project for the Technology Innovation of Hubei Province, China,
Principal and co-investigator(s) as listed on title page: Mozi Chen (Co-investigator)
Start date - stop date: 06/01/2017 - 05/31/2020

- Project title: **Research on Multi-scale Indoor Wireless Localization Method in Shipboard Environment**
Funding organization: Fundamental Research Funds for the Central Universities
Principal and co-investigator(s) as listed on title page: Mozi Chen (Sole PI)
Start date - stop date: 03/01/2017 - 05/31/2019
- Project title: **Research on Intelligent Monitoring and Differentiated Services of Port Monitoring Information in Internet of Things Environment**
Funding organization: Science and Technology Project of Zhejiang Provincial Department of Transportation, P.R. China
Principal and co-investigator(s) as listed on title page: Mozi Chen (Co-investigator)
Start date - stop date: 10/14/2011 - 12/31/2013

PUBLICATIONS

- 2021 Kehao Wang, Zhixin Hu, Qingsong Ai, Quan Liu, **Mozi Chen**, Kezhong Liu and Yirui Cong, *Membership Inference Attack with Multi-Grade Service Models in Edge Intelligence*, IEEE Network
- Kehao Wang, Hantao Qian, Xuming Zeng, **Mozi Chen**, Kezhong Liu, Kai Zheng, Pan Zhou and Dapeng Wu, *ATPGNN: Reconstruction of Neighborhood in Graph Neural Networks With Attention-Based Topological Patterns*, IEEE Access
- 2020 **Mozi Chen**, Kezhong Liu, Jie Ma, Xuming Zeng, Zheng Dong, Guangmo Tong and Cong Liu, *MoLoc: Unsupervised Fingerprint Roaming for Device-free Indoor Localization in a Mobile Ship Environment*, IEEE Internet of Things Journal (IOTJ).
- Chen Ling, Guangmo Tong, **Mozi Chen**, *NesTPP: Modeling Thread Dynamics in Online Discussion Forums*, ACM Conference on Hypertext and Social Media (HT' 20).
 - Xuming Zeng, Kezhong Liu, Jie Ma, **Mozi Chen** and Ming Yu, *Reliability and Delay Trade-off Analysis of Unslotted IEEE 802.15.4 Sensor Network for Shipboard Environment*, IEEE Sensors Journal.
 - Yuting Ma, Kezhong Liu, **Mozi Chen***, Jie Ma, Xuming Zeng, Kehao Wang, Zheng Dong and Cong Liu, *ANT: Deadline-aware Adaptive Emergency Navigation Strategy for Dynamic Hazardous Ship Evacuation with Wireless Sensor Networks*, IEEE Access. (*Corresponding author)
 - Jiaming Chen, Kezhong Liu, **Mozi Chen**, Jie Ma and Xuming Zeng, *Ship Operator's Duty Behavior Recognition Method Using Channel State Information*, Journal of Dalian Maritime University.
 - Guoyu Wang, Kezhong Liu, **Mozi Chen**, Jie Ma and Xuming Zeng, *Analysis of Influence Factors of Shipboard Indoor Location Based on WiFi Angle of Arrival Signal*, Journal of Dalian Maritime University.
- 2019 **Mozi Chen**, Kezhong Liu, Jie Ma, Yu Gu, Zheng Dong and Cong Liu, *SWIM: Speed-aware WiFi-based Passive Indoor Localization for Mobile Ship Environment*, IEEE Transactions on Mobile Computing (TMC).
- 2018 **Mozi Chen**, Kezhong Liu, Jie Ma and Cong Liu, *Spatio-temporal Fingerprint Localization for Shipboard Wireless Sensor Networks*, IEEE Sensors Journal.
- Kezhong Liu, **Mozi Chen***, E cai, Jie Ma and Shoujun Liu, *Indoor Localization Strategy Based on Fault-tolerant Area Division for Shipboard Surveillance*, Automation in Construction. (*Corresponding author)
 - Jiahao Chen, Kezhong Liu, **Mozi Chen** and Jie Ma, *Intrusion detection method of ships sensitive regions based on channel state information*, Journal of Dalian Maritime University.

- 2017 Yang Zhuang, Kezhong Liu, **Mozi Chen**, Jie Ma, *Study on Node Sensing Confidence Model in Shipboard Sensor Network*, Navigation of China.
- Zhao Hu, Kezhong Liu, **Mozi Chen** and Jie Ma, *A multi-scale indoor localization method for shipboard environment*, In proceedings of the 4th International Conference on Transportation Information and Safety (ICTIS).
- 2016 **Mozi Chen**, Jie Ma, Kezhong Liu, Zhao Hu, *Study on shipboard pedestrian localization method based on WSN*, Symposium on Cross-Strait Maritime Risk Management & Assessment.
- 2015 Kezhong Liu, Yihang Xie, **Mozi Chen** and Jie Ma, *Ship-board pedestrian positioning method by integrating Dead Reckoning and Wireless Sensor Networks*, In proceedings of the International Association of Institutes of Navigation World Congress.
- Submitted **Mozi Chen**, Kezhong Liu, Jie Ma, Xuming Zeng, Cong Liu, Guangmo Tong and Zheng Dong, *DiFS: WiFi-based Directed Fresnel Signature Localization for Dynamic Ship Environment*, IEEE Transactions on Mobile Computing (TMC).
- Kezhong Liu, Yuting Ma, **Mozi Chen***, Kehao Wang, Kai Zheng and Xuming Zeng, *WEND: An Efficient WSN-assisted Emergency Navigation Algorithm for Dynamic Hazardous Ship Indoor Environments*, IEEE Intelligent Transportation Systems Transactions (T-ITS).(*Corresponding author)
 - Kezhong Liu, Yuting Ma, **Mozi Chen***, Kehao Wang, Xuming Zeng, Kai Zheng, Zheng Dong and Cong Liu, *Wi-Watch: WiFi-Signal-based Vigilant-Activity Recognition for Ship-Bridge Watch-keeping Officers*, IEEE Intelligent Transportation Systems Transactions (T-ITS).(*Corresponding author)

PATENTS APPLIED IN CHINA

1. Kezhong Liu, Jiahao Chen, **Mozi Chen**, Shuanglin Zhou, Xing Yang, Jie Ma and Guoyu Wang, *A Novel Intrusion Detection Method and Device For Ship Sensitive Area Based on Wireless Perception techniques*, Invention Patent, No. 201810110468.4
2. Kezhong Liu, Shuanglin Zhou, **Mozi Chen**, Jiahao Chen, Xing Yang, Jie Ma and Guoyu Wang, *A Novel Shipboard Node Positioning Method Based on RSSI Sequence Matching*, Invention Patent, No. 201810113406.9
3. Kezhong Liu, Jiaming Chen, **Mozi Chen**, Xuming Zeng, Jie Ma, Guoyu Wang, Yuting Ma, Chunshen li, *Recognition Method and System of Ship Operator's Duty Behavior Based on WiFi*, Invention Patent, No. 201911166193.7
4. Kezhong Liu, Wen Yang, **Mozi Chen**, Jie Ma, Xuming Zeng, Guoyu Wang, Yuting Ma, Chunshen Li *An Indoor Positioning Method for Shipborne Environment Based on CSI Fingerprint Feature Migration* Invention Patent, No. 201911233594.X
5. Kezhong Liu, Xuming Zeng, Jie Ma, Chunshen Li, **Mozi Chen**, Guoyu Wang, *A Positioning and Navigation Method For Cruise Ship Passenger Based on Edge Computing* Invention Patent, No. 201911303593.8

HONORS & AWARDS

Excellent Student Scholarship, Wuhan University of Technology, 2019

Postgraduate Study Abroad Funding, China Scholarships Council (CSC), 2018

Excellent Student Scholarship, Wuhan University of Technology, 2017

Outstanding Doctoral Dissertation Funding, Wuhan University of Technology, 2017

Excellent Student Scholarship, Wuhan University of Technology, 2016

LECTURES

Ship Networking and Data Mining

Indoor Localization & Pattern Classification - Guest Lecturer

WUT

Graduate Course - Fall 2019

Introduction of Academic papers and writing

Sole Instructor

WUT

Graduate Course - Spring 2019

SKILLS

Programming

C, MATLAB, Python

System Frameworks

ROS (Robot Operating System), GNU Radio

Neural Networks

Tensorflow, Keras

Platforms

NVIDIA Jetson TX2, USRP N210

Miscellaneous

love teamwork and very passionate about research.

SERVICE

Journal Reviewer: IEEE Transactions on Industrial Informatics, IEEE Sensors Journal, Journal of Navigation.