# XU, HENG

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# **EDUCATION**

## TONGJI UNIVERSITY, COLLEGE OF SURVEYING AND GEO-INFORMATICS

SHANGHAI

Ph.D of Surveying and Mapping

Sept 2024 – present

• Lab: Tongji STSS-LAB(interested in Spatio-temporal Intelligent Sensing, supervised by Prof. Wei Huang)

#### TONGJI UNIVERSITY, GUOHAO SCHOOL

SHANGHAI

Bachelor of Applied Mathematics

Sept 2020 - Jun 2024

- **GPA:**3.6/5(equivalent to 81 on 100 bias) **CET-6:** 532
- Honors: Third-Class Scholarship for Undergraduate Students(2022), Individual Scholarship for Art Troupe(2024), Third Prize in China Undergraduate Mathematical Contest in Modelling (2022)

## WORK EXPERIENCE

#### LOCATION PREDICTION MODEL BASED ON URBAN INDIVIDUAL MOBILITY DATA

**SHANGHAI** 

*Undergraduate Thesis* 

*Sept 2023 – May 2024* 

- Developed a context-aware location prediction model integrating Transformer networks, LDA for environmental context, and Graph Convolutional Networks for robust location embedding. Incorporated a dual attention encoderdecoder architecture to significantly enhance prediction accuracy.
- Validated critical component contributions through ablation studies, and demonstrated superiority over existing methods by pre-processing and analyzing urban trajectory and POI data..

#### PASSIVE PURE-BEARING LOCALIZATION FOR UAV FORMATIONS

SHANGHAI

China Undergraduate Mathematical Contest in Modelling

Sept 2022

 Researched pure-bearing passive localization for UAV swarms in formation flight, developing geometric models and iterative algorithms for position determination and adjustment in various formations, including circular and conical.
Responsible for mathematical modeling and programming.

# **LEADERSHIP & ACTIVITIES**

## TONGJI UNIVERSITY VOLLEYBALL ASSOCIATION

**SHANGHAI** 

President

Sept 2021 – Jun 2024

- Responsible for the preparation and holding of many intramural volleyball events
- Manage the financial aspects of the association and reimburse them

## TONGJI UNIVERSITY STUDENT ART TROUPE FOLK ORCHESTRA BRANCH

SHANGHAI

Lead Percussion Player

*Mar 2021 – Sept 2023* 

- Participated in dozens of orchestra performances
- Responsible for the publicity and logistics of the orchestra

## **SKILLS & INTERESTS**

- Technical: Proficient in Python, C++, MATLAB, LaTeX, and GIS software.
- Languages: Fluent in English and Mandarin
- Interests: Volleyball and Music