Sizhe Chen ⓘ [Website](https://tiuzicc.github.io/) *Resume Updated on: December 12, 2025*

CONTACT INFORMATION	
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RESEARCH INTERESTS

Human-Centered Perception, Traffic & Autonomous Dynamical/Adaptive Systems, Motion Modelling, Human Factors, Human-Computer Interaction (HCI), Machine Learning (ML)

EDUCATION

Chalmers University of Technology, Gothenburg, Sweden

    M.Sc. in Complex Adaptive Systems (Track: ML)   Aug. 2023 – Aug. 2025

The University of Western Ontario, London, Canada

    Software Engineering (2022 Fall Graduate term)   Sept. 2022 - Dec. 2022

    GPA: 93%

Nanjing University of Aeronautics and Astronautics, Nanjing, China

    B.Eng. in Automation Engineering   Sept. 2018 - Jun. 2022

    Concentration: Excellence Program; Advisor: Ningyun Lu

ACADEMIC EXPERIENCE

Vehicle Safety Group, Chalmers, Gothenburg, Sweden

Research Assistant (Advisor: Yuqing Zhao)   Oct. - Nov. 2025

Conducted a driving simulation study on driving behavior with European adults; Collected vehicle, steering & acceleration, eye-tracking data to analyze attention and ran participant studies.

Computer Vision Group, Zenseact AB, Gothenburg, Sweden

Master Thesis Worker (Advisor: Mats Viberg)   Jan. - Jun. 2025

Developed clustering algorithms for non-uniform LiDAR point clouds (adaptive-resolution sensors); Achieved improved accuracy with fewer over/under-segmentation and stability in diverse scenarios.

Vehicle Safety Group, Chalmers, Gothenburg, Sweden

Research Assistant (Supervisor: Jordanka Kovaceva)   Jun. - Oct. 2024

Automated large-scale crash narrative translation; Applied pre-trained LLMs for structured information extraction, enabling per-vehicle collision type inference from free-text reports.

ViSeer Lab, ShanghaiTech University, Remote, Sweden

Research Assistant (Advisor: Quan Li)   Spring 2023 & Spring 2024

Systems for visual analytics of game algorithms and *creativity support tools* for game storytelling.

- Developed and evaluated a visual analytics framework for in-game friend recommendations, supporting balance of similarity and diversity and adjustment based on player behavior.
- Developed and evaluated an in-game mod for automatic clue capture and classification, supporting interactive story interpretation, and conducted a study on effectiveness and usability.

Computer Vision Division, FAW-Volkswagen Automotive Co., Shanghai, China

Research Intern (Advisor: Ningyun Lu)   2021-2022

Applied camera fusion and ML perception to automotive workshop intrusion systems, lowering misjudgment to 0.095%.

Nanjing University of Aeronautics and Astronautics, Nanjing, China,

Research Assistant   2021

Constructed the node map of pedestrian trajectory features and output using prediction period.

PUBLICATIONS	**PEER-REVIEWED PAPERS**

PEER-REVIEWED PAPERS

[1] ClueCart: Supporting Game Story Interpretation and Narrative Inference from Fragmented Clues
ACM CHI Conference on Human Factors in Computing Systems.
Xiyuan Wang, Yifan Cao, Junjie Xiong, **Sizhe Chen**, Wenxuan Li, Junjie Zhang, Quan Li
CHI 2025 · Full Paper · **Best Paper Award** 🏆

[2] Prefer2SD: A Human-in-the-Loop Approach to Balancing Similarity and Diversity in In-Game Friend Recommendations
ACM Conference on Intelligent User Interfaces.
Xiyuan Wang, Ziang Li, **Sizhe Chen**, Wei Wan, Xingxing Xing, Quan Li
IUI 2025 · Full Paper

PATENT

[1] Pedestrian Trajectory Prediction Method Based on Graph Neural Network with Attention Mechanism
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Registration Number: 202111171633.5, Release Date: 2022/01/04

THESIS

[1] Robust Model-Based Clustering Techniques for Non-Uniform LiDAR Point Clouds via Range Image Transformations
Master's Thesis, Chalmers, Zenseact AB, 2025.
Sizhe Chen*, Osama Al Sheikh*

SKILLS

Research: HCI, Quantitative/Qualitative Research, Iterative Design, Human Subject Studies.

Program Language: Python, C/C#, LaTeX.

Software: MATLAB, Lingo, Julia, R, Creo, NI Multisim, Gazebo, ROS, Databricks & Spark ML, Axure RP, Adobe Photoshop, Flutter, Git.

Language: English, Mandarin, Swedish(A1-beginner).

REFERENCES

1) **Jordanka Kovaceva**, Researcher, Mechanics and Maritime Sciences, Chalmers University of Technology, Sweden
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Email: jordanka.kovaceva@chalmers.se

2) **Yuqing Zhao**, Assistant Professor, Mechanical Systems Engineering, Nagoya University, Japan
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