

# Chenyang Yu

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## Education

- **University of North Texas** **Denton, TX**  
*Phd in CSE (GPA: 4.00/4.00)* *Aug. 2023 - Now*
- **Wuhan University of Technology** **Wuhan, CN**  
*Bachelor of Telecommunication Engineering (GPA: 3.77/4.00)* *Sep. 2016 - Jun. 2020*

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## Research Experience

**Harnessing LLMs for Cross-City OD Flow Prediction** **Sigspatial 24'**  
*First author* *Feb. 2024 - June. 2024*

- Developed a LLM based Cross-city OD(LLM-COD) flow prediction framework which captures how people interact with various POIs in the city related to time
- Proposed a new weighted cross entropy loss function that integrates POI semantics with traveling cost which helps LLM-COD to achieve reboust performance across cities
- LLM-COD reduces RMSE significantly compared to the state-of-the-art model across Beijing, Xi'an and Chengdu cities (reduces by **26%**).

**Protecting Vehicle Location Privacy with Synthetic Location Generation** **Sigspatial 24'**  
*Second author* *Oct. 2023 - Apr. 2024*

- I'm responsible for the geo-obfuscation model(transformer based) and generating the obfuscation locations
- The experimental results underscore the efficacy of the geo-obfuscation model in mitigating threat model attacks. (Error increased by 49.9% for lapcian noise and 30.83% for Linear Programming)

**Medical Image Detection** **Hangzhou, CN**  
*Research Assistant* *Sep. 2020 - Jul. 2021*

- Proposed a **ResNet** based neural network architecture that is tailored for detection of COVID-19 cases from chest CT images via a machine-driven design exploration approach.
- Implemented **model pruning** and **data augmentation** techniques to achieve a test accuracy 0.4% higher than the previous architecture while having 94.1% fewer parameters and 90.2% fewer FLOPs.

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## Work Experience

**Netease** **Hangzhou, CN**  
*Software Engineering, Cloud server* *Sep. 2021 - Mar. 2023*

- Implemented the database interactions, data processing logic for the Netease Cloud server reliability evaluation with **SpringBoot** and **MySQL**.
- Constructed the frontend service using **React** with state management by **Redux**.
- Developed, troubleshooted, debugged and performed Spock unit tests based on Spring Boot framework collaborate with **Jenkins**.

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## Technical skills

Language: JavaScript Python C/C ++ Java  
Framework: Node.js react pytorch  
Database: Mysql mongodb  
Others: ssh git make