# Xinyi Ling

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#### **EDUCATION**

#### The Ohio State University (OSU), Columbus, OH

Aug 2023 - Present

- Ph.D. student in Computer Science and Engineering
  - Adviser: Prof. Xia Ning
  - Focus: Large Language Models, Conversational Agent, Recommender Systems

#### University of California, Santa Barbara (UCSB), Santa Barbara, CA

Sep 2022 - Jun 2023

- Exchange Student. in Computer Science
  - Cumulative GPA: 4.0 / 4.0

#### Wuhan University (WHU), Wuhan, China

Aug 2019 - Jun 2023

- B.Eng. in Computer Science in Honor College
  - University Outstanding Graduate Award (top 10%)

#### **PUBLICATIONS**

[2] eCeLLM: Generalizing Large Language Models for E-commerce from Large-scale, High-quality Instruction Data

Bo Peng\*, **Xinyi Ling**\*, Ziru Chen, Huan Sun, Xia Ning (\* equal contribution) ICML 2024 [website]

[1] Age Estimation with Synthetic Mask Generation Based on MobileNet and Facial Keypoint Detection Yequan Bie, Xiaolong Zhu, Yize Tong, Lingjun Liao, Xiaxue Ouyang, **Xinyi Ling**, Junhui He, Teoh Teik Toe ICPICS 2022 [paper]

#### RESEARCH EXPERIENCE

#### Cyberbullying Detection, WHU

Jan 2023 – May 2023

- Utilized the Bi-GRU and the Time-Hierarchical Attention network, to better understand and combat cyberbullying by capturing contextual dependencies in comments and considering the importance of words and comments in cyberbullying sessions.
- Through testing on two datasets, the model demonstrated superior performance compared to baseline approaches, indicating its effectiveness in cyberbullying text detection.
- Supervisor: Prof. Chao Liang

#### Point-of-Interest Recommender Systems, PolyU

Apr 2022 – Jun 2022

- Research Assistant
  - Collected datasets with users and location information from Yelp and Gowalla. Completed the filtering and statistic work on datasets, making them fit for the proposed model.
  - Implemented Transformer on data sets to analyze the drawbacks of existing methods.

#### Age Estimation Research, NTU Business AI Lab

Jan 2022 – Mar 2022

- Research Assistant
  - Proposed an improved convolutional neural network architecture based on MobileNet to perform age estimation
    in faces with and without masks.
  - The method was applied to the WIKI Face dataset with more than **150,000** images, achieving MAE of 3.79 and 6.54 on unmasked and masked faces, respectively.
  - Published paper Age Estimation with Synthetic Mask Generation Based on MobileNet and Facial Keypoint Detection in IEEE conference ICPICS.
  - Supervisor: Dr. Teoh Teik Toe

## PROFESSIONAL EXPERIENCE

#### PROFESSIONAL Zhizhu Tech & NERCMS Lab, Wuhan, China

Apr 2021 – Oct 2021

- Machine Learning Intern
  - Conducted ResNet and YOLO model to detect the retrieval consistency of furniture match style, achieved 97% accuracy on style retrieval and 94% on furniture matching consistency.
  - Reproduced the related papers on furniture layout, researched interactive room type detection and automatic furniture layout based on semantic segmentation, and explored possibilities for new directions.

- Software Development Intern
  - Applied SpringBoot and MySQL to finish the backend of automatic execution of the map algorithm and the
    message notification mechanism that sends task info to the owner after task runs, improving group work
    efficiency.
  - Utilized database technologies to detect the data compatibility of the Meituan map, sped up the map-data quality analysis task by a factor of **200**.
  - Differentiated more than 1 million mount-points of road between different data versions, and detected strategy
    errors in advance.

### TEACHING EXPERIENCE

#### **Quantum Computing Teaching Assistant, WHU**

Dec 2021 – Jun 2022

- Designed the course experiments related to quantum computing, and wrote a 50-page experiment manual in latex
- Graded for homework and explained exercises to students in the class, updating and maintaining the course website.

**SKILLS** 

- Languages: Python, Java, SQL, Latex
- Libraries: Pandas, Pytorch, scikit-learn, matplotlib, scipy
- Tools: Shell, Docker, vim, Git

### AWARDS & SCHOLARSHIPS

• Outstanding Graduate

Jun 2023

• Wuhan University Scholarship, for three consecutive years

Sep 2022, 2021, 2020

• Merit Student Honors of Wuhan University, for three consecutive years

Oct 2022, 2021, 2020

• Second Prize of the Blue Bridge Cup Programming Competition

Apr 2022

• Meritorious Winner of Mathematical Contest In Modeling

Apr 2021

[CV compiled on 2024-05-06]