

# LU ZHANG

☎ +1 4704436210 📧 <https://anhzhang1994.github.io/> ✉ [zhanglu1913@gmail.com](mailto:zhanglu1913@gmail.com)

## EDUCATION

- **Georgia State University, USA** Aug 2024 - Present  
PhD student in Computer Science
- **Hanyang University, South Korea** 2023  
Master's Degree in Applied AI  
Thesis: Detection and Measurement of Illicit Promotional Content on Chinese TikTok
- **Dankook University, South Korea** 2021  
Bachelor's Degree in Software Science  
Thesis: A Deep Learning-Based Method for Enhancing Instagram Influencer Advertising

## RESEARCH INTERESTS

AI for Online Safety, Usable Security, Computational Social Science, Social Media Analysis

## PROFESSIONAL EXPERIENCE

- **Graduate Teaching Assistant** Aug 2024 - Present  
Dept. of Computer Science at Georgia State University, USA
- **AI Specialist** Jan 2024 - Aug 2024  
Research Team at Globit Co., Ltd, South Korea
- **Data Science for Social Good fellow** Jun 2023 - Aug 2023  
Data Science for Social Good fellowship at the University of Warwick, UK
- **Graduate Research Assistant** Feb 2021 - Aug 2023  
AI-Cybersecurity Lab at Hanyang University, South Korea

## AWARDS

**Fellowship** Data Science for Social Good @ University of Warwick 2023  
**Travel Grant** DAAD (German Academic Exchange Service) Data Science Summer School @ Heidelberg 2022  
**Fellowship** Brain Korea 21 (BK21) program for Leading Universities and Students 2021

## PUBLICATIONS

- **Lu Zhang**, Sungbin Park, Zuobin Xiong, Junggab Son, and Yeonjoon Lee. "Understanding Illicit Promotional Contents on Short Video Platforms", - To appear in *Tsinghua Science and Technology, 2025 (SCIE Q1, Impact Factor: 5.2)*
- **Lu Zhang**, Yeonjoon Lee. "Detection Techniques for Chinese Jargon: A Survey", *The Korean Institutes of Communications and Information Sciences (KICS) Winter Conference 2023*
- **Lu Zhang**, Yeonjoon Lee. "Stealthy and Seductive: A Survey on Online Illicit Promotion", *Conference on Information Security and Cryptography-Summer 2022 (CISC-S'22)*
- **Lu Zhang**, Hoon Ji, Yeonjoon Lee. "A Survey on Deep Learning-based Eardrum Segmentation", *2022 International Conference on Electronics, Information, and Communication (ICEIC 2022)*

## PROJECTS

- **Analyzing Patterns in Pro-China and Anti-China Propagation on Social Media** Aug 2024 - Present  
– Using multimodal models to analyze Sinophobia-related online content

- Conducting a systematic analysis of interaction and propagation patterns in pro- and anti-China social media posts and users, revealing structural dynamics that inform strategies for managing polarized discourse online

#### • **AI-Supported Smart Aquaculture System**

Dec 2023 - Aug 2024

- Constructed a Siamese Neural Network-based pipeline to identify flounder individuals in fishing farms using CCTV cameras, achieving a 95% F1-score
- Visualized the geographic and weather data. Developed a machine learning-based system for salinity percentage prediction of ocean fish farms with sensors' data, geographic data, and weather data.
- Developed an ensemble learning-based time series data forecasting pipeline to forecast fish weight growth with weather data and fish farm historical records
- Developed an optimal fish feed quantity calculation system

#### • **Identify Greenwashing Posts on Social Media** [\[Poster\]](#)

Jun 2023 - Sep 2023

- Constructed a pipeline for preprocessing, training, experimentation, and inference based on the data provided by stakeholders
- Made image and text classifiers to identify Green Messaging (F1-score: 0.79 and 0.83) of posts on mainstream social media platforms
- Calculated the potential of companies engaging in Greenwashing

#### • **Detect&Measure Illicit Promotion on Chinese Short Video Platforms** [\[Slides\]](#)

Apr 2022 - May 2023

- Crawled 100k+ posts with meta data from Chinese TikTok
- Case study of illicit content
- Qualitative analysis with creating a qualitative codebook and conducting expert interviews for ascertaining illicit jargon characteristics and data labeling strategies
- Built a hybrid mechanism to detect (F1-score = 90.7%), measure, and mitigate posts with Illicit Promotional Content on Chinese TikTok

#### • **Deep Learning-Supported Tympanic Membrane Diagnosis**

Aug 2021 - Mar 2022

- Conducted preliminary research and pilot study; discussed with physicians from Korea University Ansan Hospital to clarify particular tasks and feature selection
- Segmented the boundary of eardrum images with U-Net
- Classified eardrum images by 3 diseases with EfficientNet

## SERVICES&VOLUNTEERING

---

#### • **Teaching Assistant**

CSC 1302 - Principles of Computer Science II

Spring 2025

CSC 4780 - Fundamentals of Data Science

Fall 2024

#### • **Reviewer**

The International AAAI Conference on Web and Social Media (ICWSM) '25

2024

#### • **Member&Freshman Mentor**

March 2019 - Jan 2021

Dankook University International Student Association

## TECHNICAL SKILLS

---

#### **Programming Languages**

Python, Shell Script, JavaScript

#### **Tools**

Git, Docker, LaTeX, Tableau, Weights&Biases, MySQL, CSS, HTML

#### **AI-Related Frameworks**

Pandas, Numpy, PyTorch, OpenCV, Scikit-learn, Hugging Face, NLTK, Gensim, SpaCy, AutoML, Matplotlib, Seaborn, NetworkX, PyG...

#### **Automations**

Crawler, Pyspider, Scrappy, Selenium, Pytest, PyAutoGUI

#### **Domain Knowledge**

Greenwashing, Social Media, Darknet, Deep Web, Cybercrime

#### **Natural Languages**

Chinese (Native), English (C1), Korean (B2)

