

Ziqiang Xu

Kyungpook National University

xzq@knu.ac.kr



github



website

Research Interests

- Artificial Intelligence
- Deep learning for Computer Vision & Object Detection and Recognition
- NLP & Computer Security (Kali Linux) **Extracurricular Interests*

Education

Kyungpook National University

Mar. 2024 – Present

Graduate School, M.S.

Robot and Smart System Engineering & AI Safety Convergence

Daegu, South Korea

GPA: 4.02/4.3

Supervisors: *Bubryur Kim*

North University of China

Sep. 2019 – Jun. 2023

College of Information and Business, B.S.

Computer Science and Engineering

Jinzhong, China

GPA: 3.35/4.0

Thesis Supervisors: *Yingliang Zhao*

Academic Contributions

1. MultiScale-GreenViT: A Vision Transformer Framework with Hybrid Loss Function for High-Precision Urban Green Space Segmentation and Quantification
Under Review (Engineering Applications of Artificial Intelligence)
2. Deep Convolutional Stacked Model for Material Industry Applications: Automated Precise Porosity Assessment Based on CT Imaging
Accepted for presentation at C3 Symposium(2025)
3. Concrete Structure Crack Classification and Analysis Using Neural Network and Clustering
Accepted by ICROS(2024)
4. Application of Deep Learning Model Based on ResNet-50 Architecture in Semantic Segmentation of Satellite Images
Accepted for presentation at KICEM(2024)

Experience

Research Assistant Grade 3

Sep. 2025 – Feb. 2026

Kyungpook National University, Daegu, South Korea

BK21 Research Assistant

Mar. 2025 – Aug. 2025

Kyungpook National University, Daegu, South Korea

Research Intern

Nov. 2023 – Mar. 2024

Intelligent Construction Automation Center, Daegu, South Korea

Clustering-K-means; Edge detection; Neural Network(ResNet50)

Undergraduate Intern

Jun. 2021 – Jun. 2023

Artificial Intelligence Lab, Jinzhong, China

Development of Laboratory Management System Based on WeChat Mini Programs

Honors & Awards

- 2024–2026 KINGS Scholarship, Kyungpook National University
- Sep. 2025 Research Assistantship Grade 3, Kyungpook National University
- Mar. 2025 BK21 Research Assistantship, Kyungpook National University
- Sep. 2024 Excellence Award, Startup Idea Competition in Integrated Safety Engineering, Graduate School of Convergence Technology in Land and Transport Safety
- Jan. 2024 Merit-based Scholarship, School of Korean Language Education, Kyungpook National University
- 2021-2022 Third Prize, Lanqiao Cup National Software and IT Talent Competition(Python Group), Ministry of Industry and Information Technology of China

Technical Skills

Programming Languages: Python, HTML, CSS

Developer Tools: PyCharm, Visual Studio Code, Cursor

Frameworks / Libraries: PyTorch, Numpy(Pandas), OpenCV(cv2), TensorFlow, Git, LaTeX, Kali Linux

Language Proficiency

- **Chinese:** Native
- **Korean:** Fluent (TOPIK Level 5 [214/300])
- **English:** Basic proficiency (CET-6)