Ziqiang Xu

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🞧 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

Graduate School, M.S.

Robot and Smart System Engineering & AI Safety Convergence

Daegu, South Korea

Mar. 2024 - Present

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

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
- Mar. 2025 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, La-

TeX, Kali Linux

Language Proficiency

• Chinese: Native

• Korean: Conversational (TOPIK Level 4, Oct. 2023)

• English: Conversational (CET-6)