Ziqiang Xu

Kyungpook National University

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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   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   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, LaTeX, Kali Linux

Language Proficiency

- **Chinese**: Native
- **Korean**: Fluent (TOPIK Level 4, Oct. 2023)
- **English**: Basic proficiency (CET-6)