



**Delong Kong**  
(孔德龙)

Ph.D. Student

Qingdao University, China

[kdelon@163.com](mailto:kdelon@163.com)

+86-156-1045-9920

CET-6: 527

## Campus Activities

- Class Monitor, Graduate Class of 2022 (Sep 2022-Jun 2025)
- Executive Chair, Graduate Student Union (Jun 2023-Jun 2024)
- Vice Chair, "Vitamin C" Volunteer Association (Jun 2023-Jun 2024)

## HONORS & AWARDS

- 6x Undergraduate Academic Scholarships (2018-2022)
- First-Class Graduate Scholarship, Qingdao Univ. (2023, 2024)
- Outstanding Student Cadre (Jan 2024)
- 1st Prize, Shandong AI Contest (Provincial)
- 3rd Prize, China Graduate Mathematical Modeling Contest ("Huawei Cup")
- 2nd Prize, National Computer Skills Challenge (East China Division)
- Top 100 Volunteers, Qingdao Univ. (Apr 2024)



## EDUCATION

Sep, 2025-Present, Qingdao University, Ph.D. Student

Sep, 2022-Jun, 2025, Qingdao University, M.E., GPA: 3.91/4

Sep, 2018-Jun, 2022, Qingdao University, B.E., GPA: 3.59/4



## RESEARCH

### Hyperspectral Image Classification via Deep Learning

- Employed CNN and Transformer deep learning techniques (MHIAFormer) to achieve hyperspectral image (HSI) classification
- Proposed novel Multi-head Interacted and Adaptive Integrated Transformer
- Pyramid Spatial-Spectral Attention (PS2A) for multiscale feature extraction
- Developed Grouped Multiscale Cross-Dimensional embedding (GMCD) for efficient HSI embedding
- Spatial Adaptive Weighting Module (SAWM) achieves effective feature fusion
- Achieved 95.97%, 98.68%, 92.68%, 99.49% on four public datasets

### Yolov11 Bubbles Detection

- Built bubbles detection systems using Yolov11
- Label and verify the original data
- Calculate the density of bubbles and make corresponding decisions

### Semantic Segmentation Research

- Annotated each pixel with its corresponding category, segmented different objects with different colors
- Adopted EfficientNet-B7 network for semantic segmentation and applied Channelized Axial Attention (CAA) mechanism to improve accuracy
- Completed experiments on different datasets for comparative study

### Face Recognition System Design

- Built real-time recognition pipeline using MTCNN + VGGFace + KNN
- Required separate completion of face annotated, face detection, face alignment, face feature representation, face recognition tasks
- Resolved misclassification via detection region optimization



## PUBLICATIONS

- **D. Kong**, J. Zhang, S. Zhang, X. Yu and F. A. Prodhon, "MHIAFormer: Multihead Interacted and Adaptive Integrated Transformer With Spatial-Spectral Attention for Hyperspectral Image Classification," in *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, vol. 17, pp. 14486-14501, 2024, doi: 10.1109/JSTARS.2024.3441111.
- Li, Y.; Yu, X.; Zhang, J.; Zhang, S.; Wang, X.; **Kong, D.**; Yao, L.; Lu, H. Improved Classification of Coastal Wetlands in Yellow River Delta of China Using ResNet Combined with Feature-Preferred Bands Based on Attention Mechanism. *Remote Sens.* 2024, 16, 1860. <https://doi.org/10.3390/rs16111860>
- Fang, X., Zhang, J., Yu, X., **Kong, D.** et al. Accurate estimation of suspended sediment concentration integrated remote sensing information and a novel stacking machine learning model. *Stoch Environ Res Risk Assess* 39, 1517–1535 (2025). <https://doi.org/10.1007/s00477-025-02930-4>