

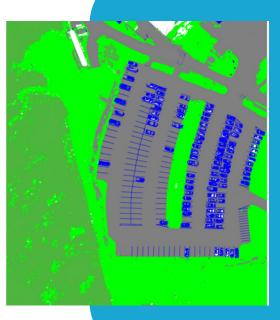
SCIENTIFIC SCHOOL "METHODS AND INFORMATION TECHNOLOGIES FOR RECOGNITION AND INTELLIGENT PROCESSING OF UNSTRUCTURED DATA"

VOLODYMYR HNATUSHENKO VITA KASHTAN





- A theory and methods have been developed for processing and analyzing large volumes of unstructured data using advanced artificial intelligence and machine learning technologies for the first time.
- Automation of intelligent data processing and analysis under conditions of uncertainty has been achieved.
- The research results can be applied to developing competitive technologies for intelligent data analysis, technical diagnostics, and real-time control of technical and information systems.



Contacts

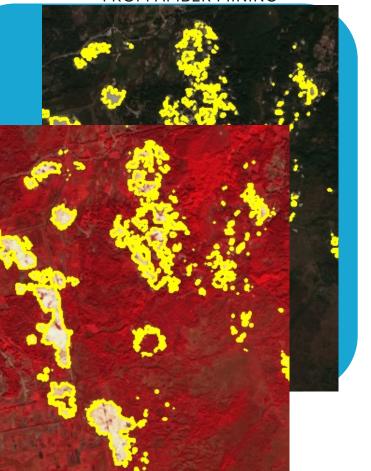


DNIPRO UNIVERSITY of TECHNOLOGY

AEROSPACE MONITORING

Intelligent satellite and aerial imagery analysis for landscape change monitoring, resource management, and risk forecasting.

LAND COVER MONITORING RESULTING FROM AMBER MINING



ENVIRONMENTAL MONITORING

DETECTION AND ASSESSMENT OF URBAN HEAT ISLANDS



FLOOD ZONE MAPPING



Environmental condition monitoring, pollution assessment, ecological disasters, and climate change forecasting.

> WEB SERVICE "INTERACTIVE FLOOD **ZONE MAP**"



MONITORING OF **DEFORESTATION AND FIRE**

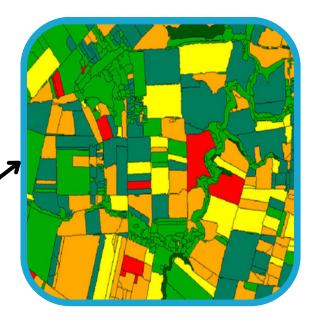


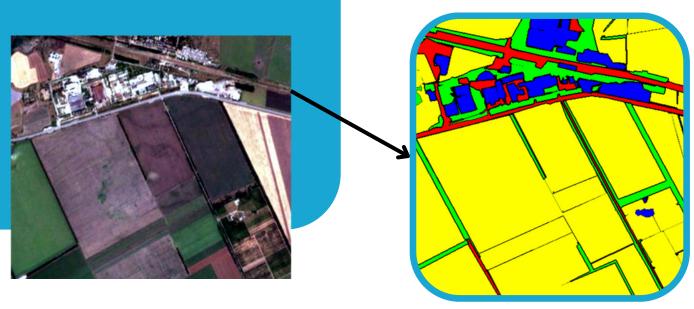


AGROMONITORING

Control of agricultural land conditions, soil moisture assessment, etc.





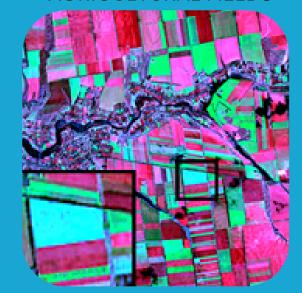


IMPROVING THE ACCURACY OF FIELD BOUNDARY DELINEATION

AERIAL IMAGE



BOUNDARY MAPPING OF AGRICULTURAL FIELDS

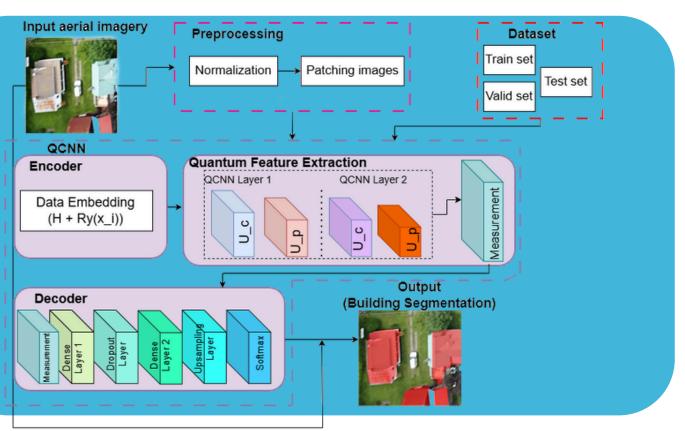




OBJECT DETECTION AND RECOGNITION

Presents information technology for semantic segmentation of objects in high-resolution aerospace images using a hybrid quantum convolutional neural network (QCNN).

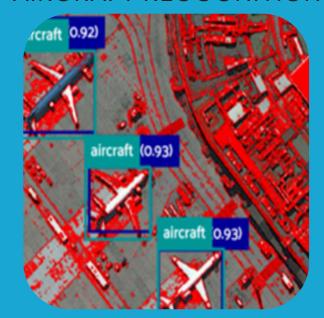




VEHICLE RECOGNITION



AIRCRAFT RECOGNITION



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1899

MEDICAL DIAGNOSTICS

Using AI and machine learning for automated medical image processing and early disease diagnosis.

