Shokhrukh Bokijonov

Teacher-Assistant
University of Geological Sciences, Department of Geophysics
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Last updated: November, 2024
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EDUCATION

Pukyong National University | Busan, South Korea
PhD in Energy Resources Engineering | March 2020 – Present   GPA - 3.97/4.5

- Mixed reality applications for mining environments, enhancing visualization and decision-making in resource extraction and safety assessment.

Pusan National University | Busan, South Korea
MSc in Geological Sciences | March 2019 – February 2020

- Investigated groundwater modeling with MODFLOW to analyze environmental hydrogeology systems.

National University of Uzbekistan | Tashkent, Uzbekistan
MSc in Geophysics | September 2016 – July 2018   GPA - 3.7/4.0

- Analyzed tectonic and oil/gas-bearing properties of Cenozoic deposits in the Fergana basin.

National University of Uzbekistan | Tashkent, Uzbekistan
BSc in Geophysics | September 2012 – June 2016   GPA - 3.4/4.0

- Applied seismic first-arrival picking techniques for near-surface studies.

EXPERIENCE

Teacher-Assistant
University of Geological Sciences, Department of Geophysics | Tashkent, Uzbekistan
August 2023 – Present

- Delivered interactive classes on gravity and seismic methods, increasing student engagement by 30%.
- Developed Python-based practical exercises for seismic and gravimetric data analysis, adopted by 100+ students.

Researcher
Geo-ICT Lab, Pukyong National University | Busan, South Korea
March 2022 – September 2022

- Explored the integration of mixed reality for subsurface visualization in mining environments.
- Published research on immersive technologies for geophysical modeling and hazard prediction in mining.
- Collaborated with interdisciplinary teams to design virtual environments simulating mining operations.

Research Assistant
Geo-ICT Lab, Pukyong National University | Busan, South Korea
March 2020 – February 2022

- Developed C# based tools for visualizing mixed reality models in mining geophysics.
- Conducted usability studies to assess the impact of virtual simulations on decision-making processes.

Research Assistant
Environmental Hydrogeology Lab, Pusan National University | Busan, South Korea
March 2019 – September 2019

- Simulated groundwater flow using MODFLOW, identifying contamination risks in urban areas.
- Supported regional water management planning through environmental data analysis.

Technical Geophysicist
UzbekGeophysics JSC | Kokand, Uzbekistan
September 2018 – January 2019

- Conducted geological and technical investigations during drilling processes, integrating gas logging.
- Interpreted well log data to identify lithological layers, assess reservoir properties, and ensure drilling efficiency.
- Analyzed real-time gas logging data for monitoring hydrocarbon shows and optimizing drilling operations.
- Utilized advanced petrophysical techniques to provide express evaluations of reservoir quality.

Technical Assistant
Institute of Seismology | Tashkent, Uzbekistan
October 2014 – September 2015

- Assisted in seismic data acquisition and processing, ensuring data quality for regional monitoring systems.

SKILLS

Geophysics: Seismic analysis, gravimetry, magnetics, electrical resistivity (ERT), seismic inversion.
Programming: Python (NumPy, Pandas, Matplotlib, TensorFlow).
Geophysical Tools: MODFLOW, ArcGIS, QGIS, ZondRes2D, IPI2Win.
Mixed Reality: 3D modeling, Unity3D, and VR/AR environment design for geophysics.
Data Science: Machine learning, deep learning, time series analysis, statistical modeling.
Soft Skills: Critical thinking, problem-solving, communication, time management.

CERTIFICATES

- **IBM Data Science Professional Certificate** (10 courses)
- **Mathematics for Machine Learning** (3 courses) – Imperial College London
- **IBM Applied Data Science Certificate** (6 courses)
- **Google IT Support Professional Certificate** (5 courses)
- **NASA ARSET Remote Sensing Certificate**
- **KIIP Korean Language Certificate** – Intermediate Level 4

PERSONAL PROJECTS

Compass Club - "Strong Together"

- Mentored undergraduate geoscience students, fostering collaboration and career development for 50+ participants.

BUSA - Busan Uzbek Students Association

- Founded and led an organization of 500+ members, organizing events and providing support for international students.

t.me/GeofizikUz   **Telegram Channel**

- Created a geoscience-focused platform with 500+ members, sharing educational resources and research updates.

LANGUAGES

- **Uzbek**: Native
- **English**: Fluent (IELTS 5.5)
- **Korean**: Intermediate (KIIP Level 4)
- **Turkish**: Proficient
- **Russian**: Pre-intermediate

Names and contact details of 2 referees

1. Dr. Ilkhom Alimukhamedov,   ilhom75@mail.ru
2. Professor Radjabov Shukhrat   radjabovs@mail.ru