

Khalil Buckmire

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EDUCATION

The Pennsylvania State University, State College, PA

**Expected Spring
2026**

Ph.D., Energy and Mineral Engineering, 3.79

University of Arkansas - Fayetteville, Fayetteville, AR

2018 - 2021

B.Sc., Geology (Geophysics) & Physics, 3.865

AWARDS

Alfred P. Sloan Scholarship 2022 - 2026

Bunton-Waller Graduate Fellowship 2021 - 2026

RESEARCH AND OTHER INTERESTS

Renewable Energy, Energy Transition, Machine Learning, Geostatistics, Environmental Geophysics, Geosciences, Python, MATLAB, R, ArcGIS, Project Management, Optimization Algorithms and Solutions.

PROFESSIONAL EXPERIENCE

Chevron, Houston, TX

**Jun 2024 – Sep
2024**

Subsurface Intern

- Enhanced project efficiency through a competitive landscape analysis that identified companies for outsourcing Chevron projects. Improved company discovery metrics through competitive landscape.
- Completed ArcGIS and machine learning replication of datasets to prove project viability and accuracy.
- Ensured strategic corporate alignment through collaboration with Corporate Assurance teams.
- Patent Pending for results of a hundred-million-dollar Size-of-Prize machine learning project.

Imerys USA, Remote

**Sep 2023 – May
2024**

Energy Intern

- 30% increase in data accuracy in energy reporting in compliance with Paris Climate Accords.
- Leveraged Google Suite and Enablon technologies to enhance emissions data reporting systems.
- Improved North American team efficiency and data handling by conducting Enablon system training.
- Completed certified training in Machine Heat Balances, leading to overall site improvements.

Imerys USA, Sylacauga, AL

**May 2023 – Aug
2023**

Geographic Information Systems Intern

- Enhanced georeferenced data systems by integrating ArcGIS with third-party data.
- Produced operational dashboards for material recovery, drilling and blasting, and fleet efficiency, optimizing resource management across the three subsections of the quarry.
- Trained staff in the operation of dashboards, ensuring the sustainability of improvements.

The Pennsylvania State University, State College, PA

Jan 2024 – December 2024

Teaching Assistant

- Taught a 60-student Capstone Design class, guiding them using Petrel, CMG, and Microsoft Suite.
- Assisted students in developing final projects, fostering a collaborative learning environment.
- Assisted in teaching a 26-student Well Logging class, guiding them through well development.

The Pennsylvania State University, State College, PA

Aug 2021 - Present

Research Assistant

- Conducted research with the Srinivasan group, focusing on applying machine learning to predict geochemical fluid flow in complex reservoirs.

The Pennsylvania State University, State College, PA

May 2022 – Aug 2022

Penn State SROP Co-Director

- Mentored 18 students over eight weeks, providing research guidance and holistic development.
- Developed and implemented programming to enhance the Summer Research Opportunities Program.

University of Arkansas, Fayetteville, AR

Feb 2021 – Apr 2021

Academic Tutor

- Tutored student athletes in Mathematics, Physics, and Geology, achieving a 100% pass rate.

Prism Education Center, Fayetteville, AR

Mar 2020 – Apr 2021

Middle and High School Math Teacher

- Taught Middle School Pre-Algebra 2 and High School Pre-AP Geometry, achieving an 80% pass rate.

RESEARCH, ACADEMIC INTERNSHIPS, RELEVANT PRESENTATIONS

Research

2019

- Buckmire, Khalil (2019). "Geothermal Energy Use and Potential for the Caribbean Nation of Grenada." Oral Presentation at the National Association of Black Geoscientists 38th Annual Technical Conference.

Academic Internships

2020 - Present

- Penn State 2020 Summer Research Opportunities Program/Professional Development Cohort
- Society of Exploration Geophysicists Carbon Solutions 2023 – Team Geophysicist
 - Shodunke, G., Henriques, C., Al Maqbali, Q., Madariaga, M. P., Alo, O., Buckmire, K., & Ferreira, I. (2023, August). Integrated subsurface characterization and evaluation of CO2 storage potential of the Illinois Basin Decatur Project (IBDP). In SEG International Exposition and Annual Meeting (pp. SEG-2023). SEG.
- Society of Exploration Geophysicists Carbon Solutions 2024 – Team Reservoir Engineer
- Society of Exploration Geophysicists Energy Exploration 2025 – Team Geophysicist/Engineer

MEMBERSHIPS

Black Graduate Student Association, The Pennsylvania State University	2022 - 2023
Order of Omega Greek Honor Society, Gamma Alpha Chapter, University of Arkansas	2020 - 2021
Phi Beta Sigma Fraternity, Incorporated	2019 – Present
Society of Exploration Geophysicists	2019 – Present
University of Arkansas National Pan-Hellenic Council, University of Arkansas	2019 - 2021
Caribbean Student Association, University of Arkansas	2019 - 2021
National Association of Black Geoscientists, University of Arkansas	2019 – 2021

SKILLS

Programming languages: Python, R

Computer software/ frameworks: MATLAB, GSLIB, ArcGIS, GAMS, Office 365, Adobe Creative Cloud, Google Suite, Canva, Petrel, CMG, Project Management (Certificate)

Languages: English (native), French (conversational)

CERTIFICATES

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- Project Management (Project Management Institute through LinkedIn Learning)
 - GIS (LinkedIn Learning)