# **EULLE STANN S. CASAQUITE**

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EDUCATION Graduation: May 2025

Augustana College Rock Island, IL

GPA: 3.74

Bachelor of Arts in Geology, Geography, Minor in GIS and Technology

Dean's List (6 Terms)

Coursework: Digital Cartography and Design, Advanced GIS, Drone Mapping & GIS, GIS for Natural Sciences, Natural Resource Management, Geomorphology and Paleoclimatology, Hydrogeology, Structural Geology and Tectonics, Geography of World Regions, Computer Science: Python, Mineralogy, General Chemistry, Pre-Calculus

#### SENIOR THESIS RESEARCH EXPERIENCE

Collaborator for the Philippine National Volcanic Threat Assessment Project (2025)

Philippine Institute of Volcanology and Seismology, Quezon City, Philippines (10 hrs./week)
 (July 2024 – Current)

**SENIOR THESIS:** IMPROVING THE EXPOSURE CALCULATION FOR THE VPI30 COMPONENT OF THE PHILIPPINE NATIONAL VOLCANIC THREAT ASSESSMENT USING SENTINEL-2 IMAGERY DATA AND GIS EXTRACTION METHODS

- Completed analysis to place large population dataset to its respective study areas
- Extracted built area pixels from Sentinel -2 imagery data
- · Compared current exposure calculation vs my improved exposure calculation to identify differences in quality
- Results will be verified by the Philippine Institute of Volcanology and Seismology to be part of the Philippine National Volcanic Threat Assessment report
- Will be presented at the Geological Society of America 2025 Joint North East North Central Section Meeting, Eerie, PA

#### RESEARCH EXPERIENCE

Cartographic Assistant | Augustana College, Rock Island, IL

Dec 2024 - Current

- Georeferenced pdf maps to be used in ArcGIS Pro
- Created and organized paleogeography shapefiles as a client deliverable

Philippine Institute of Volcanology and Seismology | Quezon City, Philippines

Jun 2024 - Jul 2024

- Created maps related to Mt. Tumatangas volcanic deposits
- Generated GIS layers for possible lahar extent of a Mt. Tumatangas eruption
- Conducted fieldwork in various outcrops in the western municipalities of Mt. Taal
- Completed remotely piloted aircraft training
- Prepared samples for XRF analysis

### Upper Mississippi Center | Augustana College, Rock Island, IL

Jul 2022 - May 2024

- Completed field and lab work to isolate, detect and quantify microplastics in water and sediment samples
- Deployed multi-parameter probes to assess water quality of watersheds and streams in Rock Island (IL) and Scott County (IA) watersheds
- · Collected fish and microorganism samples in streams to assess biodiversity health of streams
- Generated GIS maps for the city of Rock Island
- Used large dataset of field survey results to isolate and identify possible lead service lines the city of Rock Island
- Canvassed houses to identify service line materials for the city of Rock Island

GPA. 3./

# **PRESENTATIONS**

# TOPOGRAPHIC INTERPRETATION OF TUMATANGAS VOLCANO, SULU, PHILIPPINES (2024)

• Presented and proposed to the volcano section of the Geology and Geophysics Research and Development Division at the Philippine Institute of Volcanology and Seismology, Quezon City, Philippines

# UBIQUITOUS MICROPLASTICS IN FLUVIAL SEDIMENTS OF URBAN STREAM SYSTEMS IN DAVENPORT AND BETTENDORF, IOWA (2024)

 Presented at the Geological Society of America North Central/South Central Meeting and the Augustana College Celebration of Learning, Springfield, MO

# STREAM ASSESSMENT OF MICROPLASTICS IN QUAD CITY WATERSHEDS (2023)

• Presented at the Upper Mississippi River Research Consortium, La Crosse, WI

#### FIELD COURSES AND EXPERIENCES

- Taal Volcano, Philippines (July 2024) 1 week fieldwork experience to identify and understand volcanic processes through main crater tephra and tuff deposits across various outcrops/conducted house-to-house survey to assess damages of volcanically induced fissures
- Collinson Ecological Preserve, IL (April 2023) Geomorphology and surficial geology mapping, focused on interpreting
  glacial geology in the Midwest.
- Mojave Desert/Death Valley, CA (January 2023) 3-week field mapping course, which included measuring stratigraphic sections, mapping faults, and creating a geological map of rock units in the Rainbow Basin syncline near Barstow, CA.
- Baraboo, WI (November 2022) Attended a weekend field trip to Baraboo WI, to study a syncline and analyze geological structures using a Brunton Compass and stereonets.
- South Dakota/Wyoming (August 2021) summer field course of intro-level geologic concepts in the Badlands, Devil's Tower, Bighorn Mountains, and Wind River Canyon, with a focus on rock identification and pressure/temperature concepts.

#### TECHNICAL SKILLS

- ArcGIS Pro Data Engineering, Georeferencing, Charts and Reports, StoryMaps, Survey123, Cluster Analysis, Regression Analysis, Data Interpolation
- Adobe Illustrator ArcGIS Maps for Adobe Creative Cloud, Subsurface Maps, Thematic Maps
- Remote Sensing Remotely piloted aircraft training, PIX4D Mapper, Image Classification, Change Analysis
- Microsoft Products Word, Excel, PowerPoint
- Language Fluent in Filipino and Bisaya

# **HONORS & AWARDS**

Deans Scholarship

Augustana College

Awarded to students with an excellent academic record amounting to \$26,000 annually

# **IINSPIRE-LSAMP Grant**

**National Science Foundation** 

• Received NSF-funded grant for a research project amounting to \$3500

# Lucken Geology Scholarship

Augustana College

Awarded to geology students based on academic merit and financial need amounting to \$2000 annually

# **CAMPUS INVOLVEMENT**

- Udden Geology Club
- Asian Student Organization (former social media chair)