# **JILLIAN ROSE CAVELLIER**

2700 Magnolia Springs Drive APT #1308 Lexington, KY 40511 **Mobile**: (315)-489-0696 Email: <u>ircavellier@gmail.com</u>

#### **EDUCATION**

Master of Science, Geological Sciences

**Expected Graduation August 2024** 

University of Kentucky, Lexington, KY

**Bachelor of Science**, Geology, Minor in Mathematics

August 2020

State University of New York (SUNY) at Oswego, Oswego, NY

Institution GPA: 3.56

Associates of Mathematics and Science, Science Concentration

May 2018

Jefferson Community College, Watertown, NY Institution GPA: 3.68

*APPOINTMENTS* 

**Graduate Research Assistant** – Cementitious Materials

August 2022 - Present

Project Objective: Blast-Heating Effects on the Mineralogy of the Interstitial Transition Zone in Calcium Sulfoaluminate Cement Applications

**Laboratory Technician** 

July 2022

University of Kentucky's Center for Applied Energy Research Assisted with various experimental procedures

**Adjunct Professor of Mathematics** 

August 2021 – May 2022

Jefferson Community College

Instructed a mathematics course to freshman and sophomore college students

**Teaching Assistant** 

January 2020 – March 2020

Assisted with instruction and grading of an upper division course of geologic hazards for majors and non-majors

## AWARDS, HONORS AND SERVICE

**Boone Fellowship - August 2022** 

Department of Earth and Environmental Sciences, University of Kentucky

Pioneer Graduate Excellence Scholarship - August 2022

Department of Earth and Environmental Sciences, University of Kentucky

Outstanding Geology Graduate of 2020 - May 2020

Department of Atmospheric and Geologic Sciences, State University of New York at Oswego

Gary Fortoff Field Award - May 2020

Department of Atmospheric and Geologic Sciences, State University of New York at Oswego

Secretary of Geology Club - Fall 2019 - Spring 2020

## ANALYTICAL SKILLS

- Operation of a Scanning Electron Microprobe (SEM)
- Proficient in Microsoft Office 365
- MATLAB and C++ programming languages
- Operation of ArcGIS Software
- Operation of Adobe Photoshop and Illustrator
- Operation of Surfer and Canvas programs
- Production of petrographic thin sections
- Polarized light and reflected light microscopy
- Construction of geologic maps and cross sections
- Writing of geological technical reports
- Website design

## FIELD RESEARCH EXPERIENCE

#### **Undergraduate Research**

Analyzed fracture systems of the Black River and Trenton Groups in Jefferson County, NY

# FIELD SKILLS

- Electrical Resistivity Tomography (ERT)
- Electromagnetic induction (EM)
- Magnetics (Magnetometer)
- Ground Penetrating Radar (GPR)
- Spontaneous Potential (SP)

### RELATED COURSEWORK

- **Graduate Scientific Communications**
- **Graduate Tectonics**
- Structural Geology
- Igneous and Metamorphic Petrology
- Sedimentology and Stratigraphy
- Hydrogeology
- Volcanology Exploration Geology
- Mineralogy Geographic Information Systems (GIS)
- Field Geology Historical Geology
- Physical Geology
- Calculus I
- Calculus II
- Calculus III
- Calculus Based Statistics
- **Ordinary Differential Equations**
- Matrix Álgebra
- **Engineering Mathematics**
- Mathematical Modelling
- General Physics I
- Science and Engineering Physics I (Calculus Based)
- General University Physics II (Calculus Based)
- General Chemistry I and II
- Principles of Biology I and II

April 2020 - August 2020