COLE LE MAHIEU

Email: colelemahieu@gmail.com | **Cell:** (731) 217-7043 | **Website:** colelemahieu.com

SUMMARY: As an experimental physicist, my primary work involves writing scripts to analyze and visualize large datasets. Having recently obtained my PhD, I seek to apply these problem-solving and technical skills to data analytics and software positions in industry.

EDUCATION

Doctor of Philosophy in Experimental Nuclear Physics
University of Kansas (December 2025) Lawrence, KS
- GPA 3.91

Bachelor of Science in Physics and Mathematics
Union University (December 2018) Jackson, TN
- GPA 3.87
- 2018 Recipient Academic Excellence Medal for a Major in Physics
- 2018 Recipient Academic Excellence Medal for a Major in Mathematics

TECHNICAL SKILLS

- C++
- Python
- Linux, Bash
- SQL
- Git
- Java

Library database SQL project: https://github.com/colelemahieu/library_sql_web_project
Databricks SQL/PySparks project: https://github.com/colelemahieu/Databricks_Seattle_Libraries_Dataset_Project

RESEARCH

Graduate Research Assistant
University of Kansas (Spring 2022 - Present) Lawrence, KS
- Created C++ and Python scripts to visualize and model data from the Large Hadron Collider
- Used distributed computing systems to efficiently filter and transform terabyte-scale datasets
- Communication and teamwork skills developed through involvement in international collaborations at CERN

European Council for Nuclear Research (CERN)
On-site at CERN (Fall 2022) Geneva, Switzerland
- Developed C++ and bash scripts to test and debug the data acquisition system for the CMS detector's zero-degree calorimeters at the Large Hadron Collider

Research Experience for Undergraduates (REU) program
University of Oklahoma (Summer 2018) Norman, Oklahoma
- Performed research in experimental high energy physics, specifically the development of stress testing procedures for pixel detector modules of the ATLAS detector at the Large Hadron Collider

TEACHING

Graduate Teaching Assistant
University of Kansas Lawrence, KS
- *PHSX 616: Physical Measurements*, Spring 2023-Spring 2024, Spring 2025
  - Instructed students in Python fitting to increase proficiency in data visualization and interpretation