Ashely Green is a 4th year PhD Student in Archaeology at Bournemouth University in Poole, England. Ashely’s research combines the use of geophysics and artificial intelligence to improve the detection and characterization of at-risk heritage sites. More specifically, Ashely’s research focuses on the use of machine learning to automatically detect responses from potential graves in ground penetrating radar data and multi-criteria decision analysis to suggest suitable survey parameters for sites in the UK and Ireland. Ashely’s research career began in forensic anthropology/archaeology but after her first fieldwork experience in Ireland she discovered an interest in medieval and monastic archaeology and decided to pursue an MSc at Bournemouth University. While at Bournemouth University, she made the shift to geophysics after being introduced to its many applications in archaeological prospection and forensic search and recovery. This master’s work led Ashely to work in commercial archaeogeophysics in the UK where she assisted on numerous projects throughout Europe and SW Asia. While working in industry, she noticed that there were difficulties in identifying and interpreting responses from ephemeral archaeological features in the geophysical data. This motivated her to pursue research at the doctoral level. Ashely’s expertise has led to collaborations with the Irish Archaeology Field School and New Forest National Park Authority to promote geophysical surveying for archaeological prospection to students, professionals, and the general community. Ashely has served on the organizing community for a number of local and national STEM conferences, including the Computer Applications & Quantitative Methods in Archaeology – UK. Although Ashely has never attended the AGU Fall Meeting before, she is looking forward to attending the 2020/2021 meetings once she returns to the US. After graduation, Ashely plans to pursue an industry-focused post doc or consultant work to expand and implement the use of artificial intelligence in geophysics.

For more information about his research please contact Ashely Green.

Interested in being highlighted, or know a student who should be? Please email Matthew Sirianni for more information about the Student Spotlight. We are also seeking research highlights that showcase use of near-surface geophysics in other AGU sections and focus groups. If you are interested in writing a short, one-page highlight, please contact Kisa Mwakanyamale.