Daniel L. Roberts

Email: dan.roberts35@gmail.com DoB: 19/09/1988

Education

Keele University, 2013 – 2014

MSc Geoscience Research Training with International Placement (predicted Distinction)

This research-based course involves a six-month working placement within the Hydro-Geophysics and NDT Modelling Unit at the University of Oviedo, Spain.

Thesis Title: Geophysical Exploration of the Cementerio del Salvador, Oviedo, Spain.

Field Research Training:

- Cementario del Salvador, Oviedo, Spain Lead geophysical investigator over a known Spanish Civil War mass grave.
- Charterhouse Square, London Conducted a geophysical investigation over a Black Death plague pit for Channel 4.
- St John's of Jerusalem Church, Hackney, London Investigated unmarked burials within a graveyard. Continuing research started by Keele in 2008.
- St John's Church, Keele, Staffordshire Opportunity to investigate marked burials within a graveyard.
- St Chad's Church, Norton-in-Hales, Shropshire The church's bell tower was in need of renovation, so a geophysical investigation of unmarked burials within the graveyard was undertaken in order to find an area to erect scaffolding.

<u>Modules Include</u>: Postgraduate Research Skills (LSC-40043) (79%), and International Research Report (LSC-40045).

Keele University, 2010 – 2013

BSc Geology AND Physical Geography (2.2) Degree accredited by the Geological Society of London

Dissertation Title: The Geology of Carrock Fell area, with emphasis on geophysical techniques (2.1) *The project contained a two week geophysical site investigation within Carrock Fell, Cumbria, to detect mineral veins. Data was processed and outcomes helped produce a 12,000 word dissertation and a 3 km² geological map.*

<u>Study Abroad</u>: I was given the opportunity to study at the University of Utah for six months. I lived in Salt Lake City and completed modules in Geomorphology: Mountains, Rivers and Deserts (1), Remote Sensing (2.1), Earth Materials, and Volcanic Hazards.

Field Trips: Northumberland (7 days), Iceland (10 days), Spain (7 days) and South West Wales (7 days). Appointed group leader for research in Iceland to measure glacial recession at Sólheimajökull.

<u>Modules Include</u>: Hydrological and Engineering Geology (ESC-30032), Independent Field Project (ESC-30026), Natural Hazards (ESC-30009), and Geoscience Field Techniques (ESC-20040).

Researcher, Hydro-Geophysics and NDT Modelling Unit, Spain Jan 2014 – Present

Actively researching industry standard geophysical techniques, undertaking geophysical surveys, whilst providing my assistance and expertise on numerous near-surface geophysical research topics.

- Conducting ground-penetrating radar and electrical resistivity (both fixed and offset) surveys of subsurface infrastructure, and subsequently processing and analysing the data.
- Analysing previously collected ground-penetrating radar, electrical resistivity (offset) and site survey data in order to create reports and present my findings to the team.

Demonstrator, Keele University, Keele

Providing experience and expertise in a numerous amount of topics for undergraduate students on courses such as: Forensic & Historical Geoscience (ESC-20054) and Introductory Geology for Environmental Science (ESC-10042).

- Practical experience in setting up and demonstrating a range of geophysical equipment.
- Assisted up to 30 undergraduate students to guide them through their work whilst informing them how to use such software as ArcGIS, Microsoft Excel, PowerPoint and Word.
- Hosted a geophysical field excursion on Keele University's campus to detect buried pig cadavers which was the basis for their report.

Forensic Geophysics Research Assistant, Keele University, Keele

Sept 2013 – Present

Providing assistance in both the field and laboratory, conducting geophysical surveys, analysing the data and giving my advice and expertise to my peers in current research projects.

Additional Skills

<u>Geophysics</u>: AGI SuperSting with Swift ERI, Bartington Instruments MS2, Campus Tigre ERI, Geonics EM31-MK2, Geoscan RM15-D, Leica Runner 20 Automatic Optical Level Kit, Leica TPS1200 Total Station, MALÅ GPR ProEx System, Proton Magnetometer, pulseEKKO 1000 GPR, Very Low-Frequency (VLF) Method, and Worden Gravimeter.

IT: AutoCAD, ArcGIS, CorelDRAW, EarthImager (1D, 2D & 3D), GEOPLOT, Microsoft Office, Photoshop, RADAN GPR, and ReflexW GPR. Highly proficient using Linux, Windows and MacOSX.

Sept 2013 – Present