Rodd Will

AI/ML Researcher | Civil & Geotechnical Engineer | Applied Data Scientist

✉ [Email] 🌐 [Website / GitHub Pages] 🔗 [LinkedIn / ORCID]

PERSONAL STATEMENT

Experienced AI/ML researcher and engineer with a strong track record of applying advanced data science techniques to civil, geotechnical, and environmental challenges. My work spans machine learning–driven infrastructure modeling, geospatial analytics, and novel material development, with practical deployment across multiple sectors including health and agriculture. Recognized for innovation, leadership, and global collaboration, I bring technical depth, academic excellence, and industry insight into every project.

HIGHLIGHTS & IMPACT

- ☑ Led AI/ML applications in geotechnical engineering for seismic risk mitigation and ground improvement
- ☑ Published impactful research and received award for technical presentations in AI/engineering
- ☑ Collaborated across various countries on international engineering and data science initiatives

KEY TECHNICAL SKILLS

Languages & Tools: Python, R, MATLAB, ArcGIS, QGIS, AutoCAD, SketchUp, Abaqus, Code-Aster

Specialties: Machine Learning, Spatial Interpolation, Geostatistics, Predictive Modeling, Numerical Simulation

Other: Technical Writing, Research Leadership, Cross-Disciplinary Collaboration, Project Management

PROFESSIONAL EXPERIENCE

AI/ML Consultant – ENGTEC LLC | Remote | 2022 – Present

- Applied ML and robotics to precision agriculture and smart farming systems
- Developed predictive models for health diagnostics to improve clinical decision-making
- Contributed to sustainable crop yield forecasting through AI-powered analytics

Postdoctoral Research Fellow – Geo Innovation Research Lab | South Korea | 2022 – 2023

- Designed multivariate AI models to predict groundwater table fluctuations using spatial-temporal data
- Modeled geothermal energy recovery for infrastructure using simulations and experimental data
- Detected subsurface abnormalities using ML techniques to inform energy infrastructure planning

PhD Researcher – Chonnam National University | South Korea | 2018 – 2022

- Developed ML models for dynamic compaction design and performance assessment
- Created geostatistical models for liquefaction potential mapping in seismic zones
- Co-developed a novel geosynthetic material with enhanced damping for earthquake energy dissipation

SELECTED PROJECTS

- AI for Dynamic Compaction Design – Combined spatial analysis and ML for optimized ground improvement in infrastructure
- Seismic Risk Mapping with Geostatistics – Built AI-powered liquefaction models for real-world bridge site assessments
- Health Predictive Modeling – Applied AI to improve diagnosis accuracy and patient outcome forecasting

EDUCATION

Ph.D. Civil & Geotechnical Engineering – Chonnam National University, South Korea | Aug 2022

M.Sc. Geological Engineering – University of Mines and Technology, Ghana | Feb 2016

B.Sc. Civil Engineering – Kwame Nkrumah University of Science and Technology, Ghana | Jun 2010

PUBLICATIONS & PRESENTATIONS

- Link to full list via Google Scholar / ORCID

TEACHING & ACADEMIC EXPERIENCE

Cape Coast Technical University, Ghana – Adjunct Lecturer | 2015 – 2018

Chonnam National University, South Korea – Lab & Research Assistant | 2019

TU Berlin (Germany) – Intern, Geotechnical Laboratory | 2010

LEADERSHIP & RECOGNITION

- Postdoctoral, lab head, and coach for MSc Students
- Outstanding Presentation Award – KSCE National Convention, 2022
- General Secretary – GRASAG (UMaT Chapter), 2014–2015
- National Organizer – Graduate Students Association of Ghana, 2015–2016