RYAN BOBO
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OBJECTIVE

Versatile GIS professional with a Master's in Applied Geography and over a decade of expertise in utility mapping. Actively seeking a GIS developer role to apply technical prowess in designing, developing, and implementing GIS solutions.

EDUCATION

Texas State University, San Marcos, TX
Master of Applied Geography, GIS December 2023
- GPA: *4.0*
- Relevant Coursework: Geocomputation, Web Mapping, GPS and GPS, GIS II

Bachelor of Science, Geography – Water Studies December 2013
- GPA: 3.2
- GIS and Environmental Interpretation Certificates

Christian-Albrechts-University*, Kiel, Germany* June 2013
- GPA: 4.0
- Project manager of a team-based study abroad

EXPERIENCE

Texas State University – Network Operations, San Marcos, TX February 2014 - Present
GIS Specialist
- Manage, design, and maintain fiber optic and telephony OSP infrastructure using GIS (M4 solutions).
- Coordinate and advise new OSP construction, cable pulls, and fiber splicing.

Texas State University – Network Operations, San Marcos, TX August 2012 – February 2014
AutoCAD Technician
- Create diagrams of OSP enclosures and communication rooms using AutoCAD.
- Georeference diagrams using Raster Design and imported them into M4 solutions.

Hays Environmental Consulting, San Marcos, TX June 2012 – September 2012
GIS Intern
- Generated topographic maps from LiDAR, and assisted in residential facility plans and septic design.

PROJECTS

Indoor Wi-Fi Occupancy Analysis:
- Leveraged Python to process, anonymize (Faker), filter (Pandas), and visualize (Matplotlib) Wi-Fi logs of a large multi-story building to estimate indoor occupancy.
- Implemented a novel method of Wi-Fi floor-level occupancy analysis using user-role data.

Find Your Path:
- Developed an interactive web map using the ArcGIS JavaScript API to assist users in finding hiking trails.
- Feature for users to input trail issues/hazards to a hosted feature layer, enhancing trail maintenance efforts.
- Integrated a Weather API to provide current conditions and cumulative rainfall totals for judging trail health.

Transpropagation:
- Developed a Python-based ArcGIS tool for modeling line-of-sight outside wireless signal propagation.
- With the use of the Friis Transmission Equation, the tool outputs the expected signal coverage and signal power providing insights into the effectiveness of the placement of outdoor wireless access points.

SKILLS

Software: ArcGIS, FME, M4 Solutions, QGIS, Erdas Imagine, PostgreSQL, MSSMS, AutoCAD
Programming Languages: Python, SQL, Arcade, JavaScript, HTML, CSS, Git
Tech/Tools: Pandas, Matplotlib, REST, Leaflet, ESRI Technologies, LiDAR