Akunna Onyekachi

Wake Forest, NC • 919-780-1919 • akunna1mail@gmail.com
Portfolio • GitHub • LinkedIn

SUMMARY

Visionary Geospatial Developer with 5 years of experience in GIS, data analytics, app development, workflow automation, and technical support, specializing in Python, R, JavaScript libraries, Power BI, SQL, and interactive ESRI mapping tools. Adept at providing second-level IT support and deploying smart, data-driven solutions to optimize business outcomes.

CAREER GOALS

Passionate about advancing geospatial and IT solutions through expertise in ESRI ArcGIS, JavaScript libraries, and data analytics tools. Seeking exciting new opportunities to apply technical skills, solve real-world challenges, and contribute to:

1. Designing and deploying GIS tools for spatial analysis, infrastructure planning, and demographic forecasting
2. Buildings apps that integrate data analytics, databases, and visualization tools to support resource management and program impact

EDUCATION

The University of North Carolina at Chapel Hill, NC Aug 2019 – Dec 2023

- **Majors:** M.S. in Information Science (Web/Mobile App Development and Data Science Focus) and B.S. in Environmental Science (Geographic Information Systems Focus)
- **Coursework:** APIs, Cloud Computing, Data Visualization, Geospatial Statistics and Analysis, Information Retrieval, ITSM, Remote Sensing, SQL/NoSQL Databases, SharePoint Administration, User Experience Design, Web Optimization

TECHNICAL SKILLS

- **App Development & Platforms:** Microsoft Teams, Next.js, Node.js, React Native, React.js, SharePoint, Tailwind CSS, TypeScript
- **Cloud & Databases:** Firebase, Google Cloud, MongoDB, MySQL, PostgreSQL
- **Data Science & GIS:** ArcGIS, AutoCAD, GEE, Leaflet.js, Mapbox, OpenLayers.js, Power BI, Python, QGIS, R

WORK EXPERIENCE

Geospatial Developer, Sambus Geospatial, Remote June 2025 – Present

- Designed and implemented digital parcel mapping solutions using ArcGIS, supporting land administration efforts in developing African cities such as Lagos and Malabo, with a focus on preventing duplicate land sales and improving property verification
- Built prototype real estate information systems with ArcGIS GDB, integrating zoning, land use, and cadastral data into a centralized database to strengthen regional growth initiatives, enabling planners, realtors, and government agencies to validate land records
- Collaborated with regional agencies and private developers to improve property accessibility, using drone and satellite images and AutoCAD to georeference site plans, convert them to shapefiles, and address missing or fragmented land records

Full Stack Developer, FaithTech, Remote Aug 2024 – Aug 2025

- Engineered a scalable GIS-enabled admin platform for ShareBibles' distribution using Firebase, Mapbox GL JS, Next.js, and ShadCN with Tailwind CSS for styling, supporting global ministry operations
- Integrated PostgreSQL and Drizzle ORM for real-time data tracking and analysis, enabling over 400 teams worldwide to optimize Bible sharing strategies with seamless and efficient data querying
- Used Microsoft Teams to communicate updates, hold meetings, gather stakeholder feedback, and Git for efficient version control

GIS Developer - Contract, DataWorks NC, Durham, NC Apr 2024 – July 2024

- Analyzed high-value commercial property taxes, identifying over $50 million in uncollected revenue, focusing on high taxes in gentrifying neighborhoods with rising valuations impacting local residents
- Developed and enhanced a demographic mapping web application (i.e., the Durham Compass), utilizing Mapbox, Vue.js, and Node.js to visualize geospatial data from PostGIS and other sources, helping to comprehend the census and demographic makeup of Durham
- Designed and automated ETL pipelines using R and packages like tidycensus to extract, clean, and load census, real estate, property tax, and eviction data into the web application, streamlining demographic and housing metric integration
- Utilized SharePoint to manage and share datasets, documentation, and project notes with teams and partners

Geospatial Data Engineer - Intern, Durham Public Schools, Durham, NC May 2023 – Aug 2023

- Addressed student overcrowding using ArcGIS and Python's ArcPy library to analyze population density trends, predict growth patterns, and support the migration of spatial datasets from legacy ArcSDE to ArcGIS Enterprise
- Developed automated R scripts for parcel, location coordinate files, and census data extraction and updates, supporting Orthoimagery, AddressNC, Seamless Parcels, and NC OneMap initiatives, reducing manual processing time by 5 hours weekly
- Used Power BI to create visual presentations of geospatial insights for district leadership and planning teams

KEY GIS AND SOFTWARE PROJECTS

Akunna Writes (Built with: Firebase, Vite.js, React.js, Tailwind CSS)

- Developed a blog web app for posting short narratives in various languages, enabling users to log in, view, and contribute
- Purpose: To promote Igbo language literacy and cultivate a multicultural community by offering a platform for diverse voices to share stories and translations, while also serving as a source of personal motivation during challenging times

Level of Traffic Stress Road Classification and Bike Lane Recommendations (Built with: R, ArcGIS Pro)

- Classified road network data of Chapel Hill, NC into LTS categories using lane count, number of intersections, and traffic flow, and created vector layers to map low-stress routes with recommended bike lane additions
- Purpose: To support safer cycling, assist UNC's Department of City and Regional Planning, and help reduce demand for limited campus parking

Nexus (Built with: MongoDB, Mongoose, Node.js, Express.js, React.js, Tailwind CSS, Vite.js)

- Engineered a mobile-responsive therapy alternative social media platform for anonymous sharing of self-help resources and tools
- Purpose: To provide a free therapy alternative app fostering mental health support and community healing, while gaining experience in designing web apps with left bars, right bars, and a central content section

Wake County Public Transit Analysis (Built with: R, tidytransit, ggplot2, sf, tmap)

- Conducted a GIS-based analysis using GoRaleigh GTFS transit data and U.S. Census socioeconomic data to identify neighborhoods in Wake County, NC with limited access to bus routes, applying 400-meter buffers around stops
- Purpose: To support fair transit planning by highlighting underserved areas and providing insights for local officials and planners

Zoning for Dummies (Built with: Next.js, R, Tailwind CSS, Leaflet.js, and TypeScript)

- Developed an interactive, color-coded zoning web app for the Town of Wake Forest Planning Department, helping residents, students, and planners understand residential, commercial, and industrial zoning classifications
- Purpose: To make the zoning landscape more accessible and demystify urban planning concepts for the public

Additional information, links, and projects available on Portfolio and GitHub