Akunna Onyekachi

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Portfolio • GitHub • LinkedIn



Visionary Geospatial Developer with 4 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, GEE, Leaflet.js, MATLAB, Mapbox, OpenLayers.js, Power BI, Python, QGIS, R

WORK EXPERIENCE

Full Stack Developer, FaithTech, Remote

Nov 2024 - Present

- Engineered a scalable 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

Faithify (Built with: Expo Go, React Native, TypeScript, Firebase)

- Developed a cross-platform Christian mobile app featuring themed scripture verses and an interactive quiz for memorization
- Purpose: To deepen faith and enhance scripture memorization through engaging, personalized content

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

Neptune Technologies Application Platform (Built with: HTML, Tailwind CSS, Bootstrap, JavaScript, Node.js, Express.js, Google Cloud, Python)

- Leveraged data mining insights to develop a mobile-responsive job application web platform with a complementary applicant tracking system
- Purpose: To streamline hiring with an ultra-selective ATS that automates evaluation and identifies the top 10% of applicants based on resumes, form inputs, and cover letter quality

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

The Counterfeit (Built with: Next.js, Firebase, Neon (PostgreSQL), Contentful Headless CMS, Tailwind CSS, Leaflet.js, TypeScript)

- Designed a newspaper-themed Web GIS eschatological app featuring an interactive map, resources, a discussion forum, newsletter, and more
- Purpose: To help believers better understand apocalyptic books like Revelation and Daniel by exploring related themes in other Abrahamic faiths, providing essential insight to put the missing pieces of the puzzle together

