Akunna Onyekachi

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SUMMARY

Visionary full-stack developer (front-end heavy) with 3 years of experience, passionate about integrating GIS and data science into web and mobile apps within cloud and database environments. Focused on creating modern solutions for education, community building, and enhancing mental well-being. Dedicated to leveraging advanced technologies for meaningful impact and innovation.

CAREER GOALS

Dedicated to exploring new avenues in GIS, data science, and full-stack app development primarily using Python, R, JavaScript frameworks and libraries, React Native, and Leaflet. Keen on roles that offer opportunities to:

1. Contribute to the development and maintenance of high-performance GIS software development solutions
2. Utilize current and emerging data science technologies to drive innovation, creativity, and efficiency
3. Create, design, and enhance functional and interactive mobile, web applications, and websites

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 Focused) and B.S. in Environmental Science (Geographic Information Systems Focused)
- **Coursework:** UX/UI, Software Development Life Cycle, APIs, CI/CD, SQL/NOSQL Databases, Scalability, Information Retrieval, Data Mining, Cloud Computing, Remote Sensing and Spatial Analysis, Geospatial Data Analysis

TECHNICAL SKILLS

- **Back-End Development:** Drizzle ORM, Flask, Node.js, Ruby
- **Databases:** Firebase, MongoDB, Neon (PostgreSQL), pgAdmin (PostgreSQL)
- **Front-End Development:** Next.js, React.js, ShadCN, Tailwind CSS, TypeScript
- **Cloud Computing Platforms:** Amazon S3, Azure, Google Cloud
- **Data Science:** MATLAB, Python, R
- **GIS:** ArcGIS, GEE, Leaflet.js, Mapbox.js, OpenLayers.js, QGIS
- **Mobile App Development:** React Native, Swift, SwiftUI

WORK EXPERIENCE

Full Stack Developer, ShareBibles, Remote Nov 2024 - Present

- Engineered a scalable admin platform for Bible distribution using Firebase, Mapbox.js, and Next.js, supporting global ministry operations, while collaborating with the team through Git for efficient version control
- Integrated PostgreSQL and Drizzle ORM for real-time data tracking and analysis, enabling teams to optimize their Bible sharing strategies with seamless and efficient data querying
- Designed intuitive, mobile-friendly interfaces with Tailwind CSS and ShadCN to enhance user experience for volunteers and leaders

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

- Analyzed assessment and taxation issues in high-value commercial properties, identifying over $50 million in potential uncollected tax revenue, with a focus on uncovering unusually high property taxes in neighborhoods
- Developed and enhanced a demographic mapping web application (i.e, the Durham Compass), utilizing Mapbox.js, Vue.js, Node.js, and other JavaScript tools to visualize geospatial data from PostGIS and other sources, helping to comprehend the census and demographic makeup of Durham
- Automated data collection and processing by writing R scripts to input census, real estate, property tax, and eviction case records, among other data, as metric data for the interactive web application

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

- Demonstrated expertise in using GIS tools like ArcGIS and Python's ArcPy for data acquisition, population density trend analysis, and map creation, with a focus on predicting future student growth patterns to support resource allocation and address student overcrowding
- Designed and implemented complex geospatial data development projects and technology initiatives, including Orthoimagery, AddressNC, Seamless Parcels, and geospatial OpenData efforts like NC OneMap
- Developed R scripts to interact with external data sources, extracting parcel and location coordinate files for automated updates, saving approximately 5 hours of manual effort weekly

TOP GIS AND SOFTWARE PROJECTS (open for collaboration, usage, and implementation)

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

- Developed a blog web app for posting short narratives and translations 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 roads in Chapel Hill, NC into LTS categories using lane count, intersections, and traffic flow, and created vector layers to map low-stress corridors 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 Storage, 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