

Akunna Onyekachi

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SUMMARY

Visionary full-stack developer passionate about integrating GIS and data science into web and mobile apps in cloud and database environments. Focused on creating innovative solutions, particularly projects enhancing mental well-being. Proven in leveraging advanced technologies and committed to continuous learning and impactful contributions.

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 Swift. Keen on roles that offer opportunities to:

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

TECHNICAL SKILLS

- Back-End Development:** Django, Express.js, FastAPI, Flask, and Node.js
- Cloud Computing Platforms:** Amazon S3 and Google Cloud Storage
- Databases:** Firebase, MongoDB, MySQL, and PostgreSQL
- Data Science:** MATLAB, R, and Python
- Front-End Development:** BootStrap, HTML, React.js, Tailwind CSS, and TypeScript
- GIS:** ArcGIS, GEE, Leaflet.js, Mapbox, OpenLayers.js, and QGIS
- Mobile App Development:** React Native, Swift and SwiftUI

WORK EXPERIENCE

Software Developer and Data Scientist, Akunna Tech Studio, Chapel Hill, NC Aug 2023 - Present

- Created cloud environments and developed full-stack web and mobile applications, including SaaS solutions, with a focus on faith-tech apps to expand my network and foster collaboration for future improvements
- Pioneered independent data science projects, including data mining, machine learning, and web scraping, enhancing the functionality of web and mobile app projects
- Engineered dynamic and interactive visualizations to highlight complex patterns and trends, enabling impactful data storytelling
- Provided freelance web development services to various clients, including The Kenya Bankers’ (a financial institution based in Nairobi, Kenya) banking app, as well as colleagues and friends, and offered tutoring services

GIS Developer, 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, 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 regions
- 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 for the residents of Durham, NC

Geospatial Data Engineer Intern, Durham Public Schools, Durham, NC May - 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 each week
- (Codes available on GitHub, including additional GIS projects)

SOFTWARE PROJECTS

Akunna Writes Blog Web App (Built with: Firebase, Vite.js, React.js, Firestore, and Tailwind CSS)

- Developed and deployed an app for posting short stories and translations in various languages, enabling users to log in, view, and contribute
- Purpose: To foster a multicultural community by providing a platform for diverse voices to share narratives and translations, as well as to post short stories for personal inspiration during tough times

Faithify Mobile App (Built with: Expo Go, React Native, JSON, TypeScript, Firebase, and Firestore)

- Created an iOS and Android compatible Christian based mobile platform for theme-based scripture verses and an interactive quiz to strengthen memorization skills
- Purpose: To inspire users to deepen their faith through engaging content and personalized learning experiences, making scripture memorization enjoyable

Google Maps Replica (Built with: Mapbox, JavaScript, HTML, and CSS)

- Developed an interactive map that gets current location and estimates travel time between points with various transportation modes
- Purpose: To offer an intuitive navigation tool that simplifies travel planning, helps users find the quickest routes, and provides an opportunity to become comfortable integrating GIS into web and mobile applications

Job Application Platform with ATS (Built with: HTML, Tailwind CSS, BootStrap, JavaScript, Node.js, Express.js, Google Cloud Storage, and 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 Social Media App (Built with: MongoDB, Mongoose, Node.js, Express.js, React.js, Tailwind CSS, and 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

(Additional information, links, and projects available on [Portfolio](#) and [GitHub](#))

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, and Geospatial Data Analysis