Akunna Onyekachi

Chapel Hill, NC • (919)-780-1919 • akunna1mail@gmail.com • Portfolio • GitHub • LinkedIn

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 those enhancing mental well-being. Skilled in advanced technologies and dedicated to learning and making meaningful 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:

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

North Carolina State University, Raleigh, NC Present

- **Major:** M.S. in Computer Science (Networks and Systems & Architecture Focused)
- **Coursework:** Cryptography, Architecture of Parallel Computers, Computer Networks, Cloud Computing Technology, and Operating Systems

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) — left the M.S. program after the first year
- **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

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 personal 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 data science projects, including data mining, machine learning, and web scraping, and engineered interactive visualizations to highlight complex patterns and trends
- Provided freelance web development services to various clients, including colleagues and friends, using tools like React.js, Node.js, and MongoDB to build dynamic and scalable solutions
- Currently modernizing the God Image Inventory, a Web 1.0 application originally built with PHP5 and MySQL, into a Web 2.0 platform using modern tools to improve mobile responsiveness, navigation, security, and support research on spiritual growth

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 (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, NC
- 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 - 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
- (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)

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

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 apps

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)