

SUMMARY

Visionary full-stack developer with two years of experience in the field, passionate about integrating GIS and data science into web and mobile apps in cloud and database environments. Focused on creating modern solutions that build community and enhance mental well-being, committed to leveraging advanced technologies to make 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 ASP.NET. 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

- EDUCATION
- North Carolina State University, Raleigh, NC

Anticipated

 - Major:** M.S. in Computer Science (Networks and Systems & Architecture Focused - Online Program)
 - Coursework:** Foundations of Cryptography, Architecture of Parallel Computers, Computer Networks, Cloud Computing Technology, 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, Geospatial Data Analysis

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

- WORK EXPERIENCE
- Software Developer and Data Scientist, Akunna Tech Studio, Wake Forest, NC

Aug 2023 - Present

 - Enhanced website performance and user experience through modern design and development practices, while creating cloud environments and developing full-stack web and mobile applications, including SaaS solutions, with a focus on faith-tech apps
 - Provided freelance web development services to individuals and organizations, creating dynamic and scalable solutions such as dashboards, location-tracking web apps and interactive map-based platforms using tools like Next.js, Leaflet.js, ASP.NET, and PostgreSQL
 - Pioneered data science projects, including data mining, machine learning, and web scraping, and engineered interactive visualizations tools such as Power BI to enhance apps and highlight complex patterns and trends

- 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
 - 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)

- TOP WEB DEVELOPMENT CLIENTS
- ShareBibles, Waterloo, Ontario

Nov 2024 - Present

 - Developed key features of the ShareBibles admin site using Firebase, Mapbox.js, Next.js, and PostgreSQL to support scalable Bible distribution across nations, empowering teams to collaborate effectively
 - Implemented data management and collaboration tools with Drizzle ORM and PostgreSQL, enabling real-time tracking and optimization of Bible-sharing efforts for better strategic planning
 - Crafted responsive, user-focused interfaces with Tailwind CSS and ShadCN, improving usability and facilitating smooth interactions for ministry leaders and volunteers managing distribution efforts

- Assist Global, Waterloo, Ontario

Dec 2024 - Present

 - Designed and developed a safety alert mobile app using ASP.NET Core and Razor, enabling team masters to report and track safety incidents in real-time based on their location
 - Engineered dynamic buffer zones (red, yellow, green) using Leaflet.js and SQL Server, providing clear, severity-based visualizations to help prioritize responses to safety incidents
 - Optimized user interface with custom CSS, integrating interactive map features to enhance the app's usability and improve location-based safety alert reporting

- PERSONAL SOFTWARE PROJECTS (open for collaboration and implementation)
- Akunna Writes Blog Web App (Built with: Firebase, Vite.js, React.js, Firestore, Tailwind CSS)

 - Developed and deployed an app for posting short narratives 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 use as a tool for personal motivation during tough times
- Faithify Mobile App (Built with: Expo Go, React Native, JSON, TypeScript, Firebase, 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, 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, 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, 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](#))