Athens, GA, 30605
USA

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SUMMARY OF QUALIFICATIONS

Full Stack Engineer with a Master's in Computer Science degree and 10+ months of experience at Agriculture and Environmental Science lab. Responsible for designing and developing tools and services for staff and clients across 159 counties in Georgia and the neighboring states, with a focus on creating accessible and user-friendly solutions, for people of all ages, that drive operational efficiency and positive impact.

Skilled in developing fully-responsive, mobile-first web applications using React/TypeScript and integrating APIs. Adept at reading documentation to add new features to existing codebases, participating in code review processes, and conducting CI/CD testing. Self-motivated and passionate to learn new technologies and build projects on top of it. Contributing to open-source projects on GitHub for over 5 years and have successfully deployed projects on Vercel.

TECHNICAL SKILLS

- HTML, CSS (Tailwind CSS, Material UI), JavaScript, TypeScript, React, Next.js, Sanity, Cypress, Node.js, Express, Python (Django), PostgreSQL, AWS.
- Git, GitHub (Actions), Linux, Agile (Scrum), Docker.

WORK EXPERIENCE

Temporary Technical Professional (Graduate Student Assistant from Jul 2022 – Dec 2022)   Athens, GA, USA
College of Agriculture and Environmental Sciences (AESL), UGA   Jul 2022 - current
- AESL is a testing lab that provides services to 159 counties in Georgia and neighboring states, including the mortgage industry. It maintains a 7 TB Microsoft Access database, with ongoing efforts to migrate to PostgreSQL.
- Designed and developed a real-time soil ph monitoring website using *React/Next.js/TypeScript* in 1 month, enabling the technicians to view live results, and reducing the testing time from 4 minutes to 15 seconds per set.
- Automated data entry pipeline using *Python/TypeScript*, resulting in a reduction of time from 2 minutes per handwritten form to 25 seconds on average, by implementing autocomplete functionality for various fields.
- Rewrote the entire codebase for a proprietary language over the course of 3 months, converting information from a 200-page manual to a *TypeScript/Next.js* application and updating the queries from *Access* to *PostgreSQL.*
- Brought up development and production servers, including IP whitelisting and backup configuration with periodic syncing. Achieved this by learning *Microsoft PowerShell* and *Windows Task Scheduler* and working with a coworker over the course of a month and helped to automate some of their jobs also.

Graduate Teaching Assistant   Athens, GA, USA
Computer Science Department, UGA   Jan 2022 - Aug 2022
- Led weekly meetings and facilitated group discussions for the course *Discrete Mathematics for Computer Science*
- Updated course materials to address students' questions and concerns, improving their understanding in a class of 180 students.
- Mentored 2 transfer students for the whole semester, covering the entire course in detail and emphasizing practical applications.

ADDITIONAL EXPERIENCE

Google CS Research Mentorship Program, Athens, GA (Remote)   Sep 2022 – Dec 2022
- Selected to participate in a 12-week Google Research program.
- Engaged in discussions with a Google mentor and peers on topics related to computer science research, including diversity and the impact of AI.

Artificial Intelligence Hackathon Winner, India   May 2019 – Jul 2019
- Won first place in a nationwide hackathon, from a pool of 0.6 million candidates.
- Built a unique, fully deployable parking space detection system using PyTorch and OpenCV.
- Developed and designed the only submission to use video as input, enabling predictions to adjust dynamically in response to camera movements and changes in environment.

EDUCATION

University of Georgia, Franklin College of Arts & Sciences   Athens, GA, USA
Master of Science in Computer Science (GPA: 3.82/4.00)   Jan 2021 – Dec 2022

Punjab Engineering College (Deemed to be University)   Chandigarh, India
Bachelor of Technology in Electronics and Communication Engineering (CGPA: 7.0/10.0)   Aug 2016 – Jun 2020

PROJECT EXPERIENCE

Travel Companion Application | GITHUB, DEMO
- Developed a Travel Companion Application utilizing *Google Maps API*, *Geolocation*, and advanced *React/Next.js* and *TypeScript* practices, leading to seamless user experience and efficient data handling. Also, gained proficiency in using *Google Cloud Platform (GCP)* for API setup and management.
- Used *Material-UI* for creating the interface and leveraged *Travel Advisor API* to fetch location-specific data on restaurants, hotels, and attractions for a highly personalized user experience, including filtering of locations based on ratings.
- Ensured app security and maintainability with environment variables, hooks, refs, and a well-organized folder structure, resulting in a highly scalable and deployable project on *Vercel*.

Realtime Chat Messaging App | GITHUB, DEMO
- Developed and deployed a full-stack chat application with authentication, *Twilio* SMS notifications, and a wide array of features, including direct/group chats, emojis, reactions, GIF support, and message editing, using *JavaScript, React, Node.js, Express and Stream API*.
- Implemented advanced *React* best practices, custom hooks, and *React Context API* to create a responsive, and scalable chat interface; and acquired skills to create fully custom chat applications by doing this project.
- Seamlessly integrated *Twilio* for real-time SMS notifications for offline users and employed *Vercel* for deploying the frontend application and *Render* for deploying the Express server, showcasing proficiency in diverse technology stacks and third-party APIs for a complete, mobile-responsive chat experience.

Ecommerce Website | GITHUB, DEMO
- Developed and deployed a fully-responsive, modern full-stack e-commerce application on *Vercel* using *React*, *Next.js*, *TypeScript* with integrated *Stripe* payments, advanced cart functionalities, and dynamic content management using *Sanity* for seamless content updates.
- Employed advanced React and Next.js best practices, such as hooks, refs, state management with React Context API, server-side rendering, and static generation for optimal website performance and user experience.
- Implemented engaging UI features such as hover animations, dynamic product detail pages, and animated recommendations, ensuring an optimal shopping experience across all devices.
- Implemented *Stripe* integration for secure payment processing, shipping method selection, and checkout, resulting in a seamless and efficient purchasing experience for customers.

Bookstore application | GITHUB
- Developed on online bookstore application using Django and HTML/CSS/JavaScript, featuring secure user authentication, account activation, profile editing, and password management with automated email notifications to enhance user experience and security.
- Implemented advanced search functionality, allowing users to filter books by category, author/publisher, ratings, and price, alongside a seamless ordering process, including promotion code integration, order summary, and reordering options.
- Enabled admin capabilities to add and manage promotions, with automatic email notifications to opted-in users, while incorporating inventory checks for reordering and ensuring promotion validity, resulting in a comprehensive and user-friendly e-commerce platform.

Youtube Video Application | GITHUB, DEMO
- Developed and deployed a Youtube clone application on *Vercel* using *React/Next.js* and *TypeScript*, leveraging *Material-UI* for a visually appealing and responsive design, and using *RapidAPI* to access *Youtube v3 API* endpoints for fetching video and channel data.
- Acquired expertise in *React* functional components and their reusability, efficient file and folder structure, and mastery of *Material-UI*, enabling the ability to build any API driven web application.
- Ensured optimal responsiveness across devices using well crafted media queries, and utilizing RapidAPI VSCode extension for API testing, demonstrating proficiency in creating a seamless, fully-functional video browsing experience.

Restaurant Website | GITHUB, DEMO
- Transformed a *Figma* design into a fully responsive website with modern UI/UX using *React, Next.js*, and *TypeScript*, showcasing proficiency in design-to-development implementation and seamless deployment.
- Mastered essential CSS properties for *flex* and *grid* layouts, applied *BEM* methodology for scalable styling, and integrated soft animations and complex gradients, along with carefully crafted media queries for optimal responsiveness across various devices.
- Leveraged React functional components and reusable code, adhering to best practices in file and folder structure, resulting in a well-organized and maintainable web application.