

Wanda L. McCrae

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Professional Summary and Objective

Results-driven Full Stack Developer with a strong backend focus, specializing in Python, SQL, and Django. Currently architecting the scalable backend for a startup, Tow Zone Alerts. Proficient in building dynamic frontends with React and adept at fostering collaboration in cross-functional teams to deliver robust, user-centric applications.

Key Career Highlights

- Spearheaded the design of a scalable microservices backend architecture and account services API, improving team alignment and accelerating development velocity.
- Engineered and launched Headline Editor, an interactive React SPA, on GitHub Pages, enabling users to creatively engage with news by searching and dynamically editing New York Times article headlines.
- Designed, implemented, and shipped mission-critical production firmware for air traffic control and military radar systems, supporting safety in high-stakes environments as a senior hardware engineer for Telephonics Corporations.

Technical Skills

Programming: Python 3, JavaScript ES6+, SQL, HTML5, CSS, Agile Methodology, Docker

System Design: Microservices, REST APIs, Domain-driven design, Monoliths, Message Passing, SaaS

Front-End: React.js, React Hooks, DOM Manipulation, Redux Toolkit, Bootstrap, Tailwind CSS, Chakra UI

Back-End: Django 4, JSON, FastAPI, PostgreSQL, RabbitMQ, Twilio, JSON Encoders

Programming Experience

Front End Developer, Headline Editor | wlmccrae.github.io/headline-editor-ghpage 2024 - present

- Engineered and launched an interactive React SPA on GitHub Pages, enabling users to creatively engage with news by searching and dynamically editing New York Times article headlines.
- Built a responsive and accessible user interface using React.js, Chakra UI, and custom CSS to ensure an intuitive user experience.
- Integrated the New York Times Archive API to dynamically fetch and display articles based on user input, facilitating seamless content exploration.

Backend Web Developer, Tow Zone Alerts (Startup) | towzonealerts.com 2023 - present

- Spearheaded the design of a scalable microservices backend architecture and account services API, improving team alignment and accelerating development velocity.
- Architected a secure FastAPI microservice with PostgreSQL to manage user authentication and account data, ensuring system reliability for a growing user base.
- Orchestrated a containerized development workflow using Docker and GitHub, standardizing environments and streamlining collaboration for a fully remote team.
- Supported React.js-based front-end development to ensure cohesive integration between backend services and the user interface.

Front End Developer, Simple Weather | itsstheweather.netlify.app 2023 - present

- Developed and deployed a public-facing weather SPA on Netlify, providing real-time meteorological data for any US city to thousands of monthly users.
- Designed and styled the single-page application using React.js and CSS, focusing on a clean, user-centric design for optimal usability.

FullStack Developer, ShapeShifters | gitlab.com/512kma/module3-project-gamma 2023

- Designed and styled a fitness meetup SPA using React with Redux Toolkit and Tailwind CSS, creating a modern and responsive user interface.
- Developed a robust RESTful API with FastAPI and PostgreSQL, efficiently handling all CRUD operations for event data and improving backend performance.
- Implemented a secure PostgreSQL database to allow authenticated users to create, read, update, and delete event information.

Senior Hardware Engineer, Telephonics (Farmingdale, NY)

- Designed, implemented, and shipped mission-critical production firmware for air traffic control and military radar systems, supporting safety in high-stakes environments.
- Authored comprehensive unit tests to validate firmware reliability and prevent regressions in production deployments.
- Actively participated in rigorous code reviews to maintain high code quality and team knowledge sharing.

Frontend Web Developer, Lotusland Fine Art (Volunteer) | lotuslandfineart.com

- Developed and managed a multi-page fine art photography website using HTML and CSS, enhancing the gallery's online presence.
- Increased site engagement by publishing weekly, meticulously coded blog posts with optimized images and CSS styling.
- Successfully migrated the website to a self-hosted WordPress installation, empowering the client to independently manage content.

Other Experience

Software Engineering Immersive Resident, Galvanize (New York, NY) - Remote 2023

- Provide one-on-one and small-group technical support to students on full-stack JavaScript concepts, data structures, and algorithms, improving project completion rates.
- Conduct detailed code reviews on student project work, providing actionable feedback that elevated code quality and best practices.
- Served as a key support resource for instructors, answering student questions in real-time during class and lab sessions.

UX Designer, Creative Luv (New York, NY) - Remote 2022

- Audited client website responsiveness across multiple browsers (Firefox, Chrome, Safari) and devices, identifying key usability issues.
- Researched and proposed modern WYSIWYG editor solutions, enabling the client to autonomously update product details and pricing, reducing long-term maintenance costs.

Education

Syracuse University, M.S. Computer Engineering

New Jersey Institute of Technology, B.S. Computer Engineering

Hack Reactor, Advanced Software Engineering Certificate