

Wanda L. McCrae

New York, NY | wlmccrae@gmail.com | 347-619-2632 | LinkedIn: wmccrae | wandamccrae.com

Professional Summary and Objective

With a decade of experience in a professional engineering environment and a year of experience leading a backend design team, I excel at designing, building, and optimizing backend systems.

Key Career Highlights

- Leading the design and implementation of Tow Zone Alerts' backend architecture and account services API, fostering collaboration among team members to achieve a unified and effective solution using Docker, FastAPI/Python, and SQLAlchemy.
- Designed, implemented, and shipped production software during 10 years as an engineer for Lockheed Martin and Telephonics Corporation.
- Designed, implemented, and deployed Headline Editor to GitHub pages, allowing users to search the NY Times archives by year and month and edit the headline for the selected article.

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

Senior Hardware Engineer, Lockheed Martin (Syracuse, NY) and Telephonics (Farmingdale, NY)

- Designed, implemented, and shipped production software, which was deployed in air traffic control and military aircraft radar systems.
- Coded and ran unit tests to exercise production code.
- Participated regularly in code reviews.

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

- Deployed to GitHub pages, allowing users to search the NY Times archives by year and month and edit the headline for the selected article.
- Designed and styled the Single Page App using React.js, CSS, and Chakra UI.
- Integrated the NY Time archive API to receive articles for a given month based on user input.

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

- Leading the design of the backend architecture and account services API, fostering collaboration among team members to achieve a unified and effective solution.
- Collaboratively designing the FastAPI-based microservice with a PostgreSQL database used for user account creation, authentication, and maintenance.
- Utilizing GitHub and Docker containerization for development as part of a remote engineering team.
- Supporting React.js-based front end development as needed.

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

- Deployed to Netlify, allowing internet users to get the local weather for any USA city.
- Designed and styled the Single Page App using React.js and CSS.
- Integrated 3rd party API calls to retrieve date/time, location, and weather information based on user input.

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

- Designed and styled the fitness meetup single page app using React with Redux Toolkit and Tailwind CSS.
- Utilized FastAPI to query a PostgreSQL database and call our RESTful API routes.
- Implemented a PostgreSQL database to allow authenticated users to create, read, update, and delete event information.

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

- Developed and managed a multi-page fine art photography website using HTML and CSS.

- Enhanced site engagement by weekly blog post updates with meticulous coding, images, and CSS styling.
- Successfully transitioned the website to a self-hosted WordPress installation.

Other Experience

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

- Provide one-on-one and small group technical and project management support to students.
- Conduct code reviews on students' project work.
- Be present during class time to answer questions or provide support to instructors.
- Share observations on student progress with the Cohort Leads and instructors.

Education

Hack Reactor, Advanced Software Engineering Certificate 2023

Syracuse University, M.S. Computer Engineering

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