

**Lauren M. Lattanzi**  
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**OBJECTIVE:** Seeking a full-time software position where I can leverage both my front-end and back-end development skills to enhance functionality of a product.

**EXPERIENCE:**      **R&D Engineer**      **September 2018 – Present**  
*Blur Product Development*      *Cary, North Carolina*

- Owned the development of complex ostomy leak detection and notification algorithms in MATLAB for implementation in wearable medical device firmware.
- Leveraged OOP in MATLAB and interpreted firmware written in C to optimize code compatibility and conversion from the development/test environment in MATLAB to production firmware.
- Extensively tested the algorithms and associated mobile application in simulated use and V&V testing environments to bring the device to successful clinical trials.
- Solely responsible for processing and analyzing all data collected from the app and wearable device logs during clinical trials to assess product performance, study user behaviors, and identify issues/potential improvements.
- Worked closely with the app and firmware developers to communicate bugs, solutions, and functions necessary to interface with the algorithm.
- Used GitLab and GitKraken for source control and issue tracking.
- Followed agile development practices and project management using Jira.

**PROJECTS:**      **Roam**      **July 2022 - Present**

- Created an interactive MERN stack single-page application that allows users to create trip itineraries with friends, split expenses, and offset carbon emissions.
- Leveraged Apollo GraphQL with an Express.js server and Mongoose ODM to query and manipulate a MongoDB database containing user, trip, and expense data.
- Implemented a carbon offsetting feature where users can donate to a variety of charities using Stripe API to complete payments.
- Built a responsive front end using React, Material UI, and custom CSS.
- Incorporated user authentication middleware using JWT to selectively limit site experience to logged in users and protect API routes.

**Twitcheer**      **May 2022**

- Built a full stack web app to serve as a bird watching blog for the local community.
- Developed the back-end in Node.js following OOP and the MVC paradigm with the use of Express, MySQL, and Sequelize ORM.
- Created a front-end with Materialize CSS framework, HTML generated with handlebars.js, and JavaScript for event handlers and requests to internal APIs.
- Created RESTful web APIs in Node.js to get, edit, delete and add blog posts, comments, and users stored in SQL database which were tested using Insomnia.
- Implemented user authentication with password hashing to protect API routes.

**EDUCATION:**      **NC State University and UNC Chapel Hill**      **May 2018**  
*B.S., Biomedical and Health Sciences Engineering*      **GPA: 3.7**

**Full Stack Coding Bootcamp**      **February 2022 – July 2022**  
*UNC Chapel Hill*

**TECHNICAL SKILLS:**      JavaScript, HTML, CSS, Node.js, MERN Stack, Apollo-GraphQL, SQL, jQuery, Responsive Design, Git, Agile Development, Jira, MATLAB