

# Zachary A. Flegle

[zflegle3@gmail.com](mailto:zflegle3@gmail.com) • (404) 790-1309 • [Github](#) • [Portfolio](#)

## Professional Experience

### KnoCommerce

Remote, United States

#### Full Stack Software Engineer

June 2023 – Present

- Led the development of three secure integrations with external e-commerce platforms, leveraging OAuth 2.0 and other authentication protocols to enable seamless survey data exchange for marketing campaign automation
- Designed and implemented a reporting feature using SQL and dynamic Vue components to aggregate and display brand-level survey data alongside global benchmark data, empowering users with actionable insights across demographics such as age and gender
- Built a multilingual user registration flow and survey system for TikTok's global survey integration, using Vue, Nuxt.js, Node.js, and PostgreSQL, successfully onboarding 1000+ users within the first 6 months
- Partnered with another developer to migrate the application's front-end codebase from Vue 2 to Vue 3 and deploy a modern UI component library, improving maintainability and enhancing user experience
- Developed a plan upgrade UX to transition users from free to paid plans while collaborating with product leadership and customer-facing teams to quickly iterate and refine the feature ahead of the new plan launch deadline

### Upwork

Remote, United States

#### Freelance Front End Software Developer

January 2023 – July 2023

- Implemented interactive UI components and user flows with React and Node.js, enabling intuitive user interaction and functionality across two web applications

### Procter & Gamble

Cincinnati, Ohio

#### Global Material Developer

February 2021 – December 2021

- Managed nonwoven topsheet development by fostering strong supplier relationships, defining material specifications, and collaborating with project stakeholders across multiple international locations to ensure successful product delivery
- Led the research, development, and production of four innovative nonwoven topsheet materials, resulting in \$2 million of annual net savings and mitigating supply chain risks during the COVID-19 pandemic

### Gulfstream Aerospace

Savannah, Georgia

#### Operations Engineer I & II

July 2018 – December 2020

- Spearheaded the development and implementation of a manufacturing conformity software, resolving over 300 installation discrepancies and ensuring proper engineering configuration on all experimental aircraft
- Identified anomalies in the aft longitudinal splice design and led cross-functional collaboration to redesign the structures and manufacturing processes, achieving an annual cost savings of \$126,000 per aircraft program

### Co-Op Program Mentor

July 2018 – December 2020

- Supervised a weekly mentorship program to provide students with professional development skills and experiences

## Programming Experience

### Ski Conditions Visualization Web Application

[Live Demo](#) | [Source Code](#)

(JavaScript, React.js, Redux, Sass, Node.js, Express, MongoDB, Mongoose, Jason Web Tokens, Google Maps API, Vercel)

- Designed and published a winter weather application with an intuitive Google Maps user interface, enabling users to search, visualize, and sort real-time ski conditions for over 300 resorts across the United States
- Built a RESTful API and a non-relational database to manage user CRUD functions including authentication, profile updates, and image uploads, resulting in efficient data management and a seamless user experience

### Battleship Game vs Computer Algorithm

[Live Demo](#) | [Source Code](#)

(JavaScript, HTML, CSS, Webpack, Jest)

- Employed Test Driven Development (TDD) methodologies using the Jest testing framework to develop a single player game application, leading to improved code quality and increased confidence in program execution

## Technical Skills

**Languages:** HTML, CSS, Sass, JavaScript, TypeScript, Matlab, Python, SQL

**Frameworks/Databases:** Vue.js, React.js, Pinia, Vuex, Redux, Tailwind CSS, Node.js, Express, PostgreSQL, MongoDB, Mocha

**Tools & Miscellaneous:** Git, Github, Npm, Webpack, Vercel, Heroku, Postman

## Education

### Georgia Institute of Technology

Atlanta, Georgia

Bachelor of Science in Mechanical Engineering