

Pauline Tanzman

ptanzman@gmail.com | www.paulinetanzman.com | www.linkedin.com/in/pauline-3414159 | Boston MA

Professional Summary

Full-stack software engineer (React.js, Node.js, Express.js, MySQL) with 2+ years experience in SaaS for manufacturing. Leveraged 10+ years in healthcare to bridge patients needs with technical solutions. Experienced in end-to-end development including architecting database schemas, designing RESTful APIs, and delivering semantic, accessible frontend interfaces.

Work Experience

MachineMetrics | Full Stack Software Engineer | 12/2022 - 04/2025

- Architected a microservice (Python, FastAPI, Selenium, Chrome for Testing, AWS SES) to scrape and email dashboards on a recurring schedule, replacing user-initiated checks and adopted by 50% of customers
- Solved critical memory leaks with context managers, and UI improvements (Python, React), allowing 900% more charts and graphs to be scraped
- Resolved data inconsistency between a GraphQL-accessed PostgreSQL database and a MySQL database by designing and implementing a two-phase commit protocol, ensuring atomicity
- Reduced network overhead and ensured transactional integrity by dynamically generating atomic GraphQL mutations, reducing network calls by up to 80%
- Devised a multi-architecture Docker workflow (x86 /ARM development) allowing for ease of development across multiple platforms
- Developed new and refactored existing RESTful CRUD APIs (Node.js, Express, MySQL) as a core responsibility, maintained scalable backend systems, and authored documentation (Swagger, READMEs) which decentralized tribal knowledge
- Enhanced UI responsiveness by integrating WebSocket for real-time updates and AbortController to cancel stale requests, preventing UI freezes during long-running processes
- Translated Figma designs into production-ready React components with reusable logic and Redux state management

Arroyo | Co-Creator & Software Engineer (Open Source Project) | 04/2022 - 10/2022

- Designed and implemented a user friendly UI(React, Redux) with a responsive design
- Collaborated with 3 engineers across multiple time zones (GitHub/Slack)
- Co-authored technical documentation (arroyoframework.com/case-study.html)

Software Engineer | 04/2020 - 04/2022

- Built multiple full-stack Web Applications (Node.js, Express.js, MongoDB, React/Redux) such as a RequestBin Clone, a Trello-like task Manager and a (Ruby/Sinatra) mental health tracker

ENT Specialists | Staff Audiologist | 07/2011 - 12/2021

- Communicated with patients and caregivers using reflective listening and motivational interviewing to discover patient needs
- Diagnosed assistive device failures by methodically eliminating mechanical and user-related causes

- Simplified complex diagnostic data into actionable reports and recommendations to successfully use assistive technologies

Skills

Frontend: JavaScript | TypeScript | React | Redux | Redux-Saga | HTML5/CSS3 | Apollo Client

Backend: Node.js | Express.js | Python (FastAPI)

Tools: Docker | Git | AWS (SES) | GraphQL | Swagger | Selenium

Databases: MySQL | PostgreSQL | Sequelize (ORM)

Education

Launch School | Software Engineer (Capstone Project) | 02/2022

Northeastern University | Doctor of Audiology | 06/2011

University of Massachusetts at Lowell | Bachelor of Music | 06/2006