

Billy Lu

Full Stack Software Engineer

Costa Mesa, CA | 951-312-9174 | billyfwlu@gmail.com | [GitHub](#) | [Portfolio](#) | [LinkedIn](#)

A results oriented software engineer with ten (10) years' experience in Medical Device engineering. I excel in fast-paced environments where I can hit the ground running. Strong critical thinker, data driven and risk-based problem solver, I implement effective solutions to complex problems drawing from an array of disciplines.

SKILLS

- HTML, Javascript, React, Python
- CSS, Tailwind
- Express, EJS, APIs / Axios / Fetch
- NodeJS, NEXT.js, Postgres, MongoDB / Mongoose, SQL, Sequelize, VBA
- Project Management, Root Cause Analysis, Process Development / Validation, Test Method Development / Validation

EXPERIENCE

Software Engineering Immersive | General Assembly | Remote

April 2022 – July 2022

Successfully completed 500+ hours of expert led instruction in Full Stack, APIs and hands-on learning of Software Engineering fundamentals and the industry's most in demand technologies. Developed projects, including:

- **GunShapes:**
 - Tanks/Gunbould inspired 2-Player Game using Javascript / CSS / HTML and Canvas
 - [\[GitHub Repository\]](#) [\[Deployed Link\]](#)
- **SousChefDobbie:**
 - Inspired by my passion for food and cooking, this site is meant to allow users to create and share recipes with the added benefit of showing the individual and aggregated nutritional information from the USDA API. Built with – Express, NodeJS, and Postgres / Sequelize. Coupled front end and back end.
 - [\[GitHub Repository\]](#) [\[Deployed Link\]](#)
- **DelishaGram:**
 - Collaborative effort that planned and built an instagram-like web-based platform where you can create and share posts/food pictures. Built with MERN stack – Group Project with GA, decoupled front end back end.
 - [\[GitHub Repository\]](#) [\[Deployed Link\]](#)
- **Ensemble-Closet:**
 - Collaborative effort that planned and built a fashion related web-based platform where you add articles of clothing to a digital closet for clothing tracking and outfit planning. Built with MERN stack – Group Project with GA, decoupled front end back end.
 - [\[GitHub Repository\]](#) [\[Deployed Link\]](#)

New World Medical | Rancho Cucamonga, CA

March 2020 – April 2022

Principal Quality Engineer, Design Assurance

- Led a cross functional team of R&D, QC, and Sustaining to plan, develop and execute 23 Test Method Validations as required.
- Performed statistical analysis of process capability to evaluate against protocol acceptance criteria.
- Planned and managed 12+ US/OUS supplier qualifications which include supplier development, reviewing/approving of documentation and relevant validation activities.
- Reviewed and approved/rejected document submissions as part of document/process control to ensure sustainable/scalable processes are implemented while meeting best practices and compliance requirements.

- Rewrote process validation and test method validation procedures to clarify requirements and provide guidance on best practices.
- Mentored less experienced engineers and technicians and expanded their understanding of the quality systems to improve the application of theory with real world experience.

Orchid Orthopedic Solutions | Santa Ana, CA

May 2018 – March 2020

Quality Engineer

- Created VBA Macro to programmatically convert drawing specifications into inspection plans improving duration time from 6 hours per drawing to 1 hour per drawing, which results in increased throughput and estimated annual savings of \$90k+.
- Led the implementation of the AQPQ process, driving new projects through the phase-gate approach to systematically meet customer design requirements.

EDUCATION

- **Immersive Software Engineering Course** | *General Assembly* | Remote Completed 2022
- **BS, Biomedical Engineering** | *California Polytechnic State University* | San Luis Obispo Graduated 2012