




Portfolio:
gabe-goodman.com

Gabe Goodman
Software Engineer
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Education

Northeastern University Boston, MA

May 2019

Bachelor of Science in Bioengineering

Concentration in Medical Devices, Minor in Materials Science and Engineering

GPA: 3.7 **Honors:** University Honors Distinction, *magna cum laude*

Code Chrysalis Tokyo, Japan

December 2021

Advanced Software Engineering Program

Full Stack development with agile methodologies

Professional Experience

JET Program – Tanashi Technical Highschool, Tokyo, Japan

July 2019-Present

Assistant Language Teacher

- Participated in curriculum development and redesign, with emphasis on communication skills
- Regularly assessed students' written and verbal communication in one-on-one evaluations

Bose Corporation – Bose Hear, Framingham, MA

January-August 2018

Medical Device Engineering Co-op

- Informed the development of a direct-to-consumer hearing aid as a cross-functional engineer
- Designed mechanical components within complex assembly geometries using Siemens NX
- Drafted injection-molded plastic parts in CAD, prototyped using 3D printing and Protomold
- Fabricated looks-like, feels-like models for wear and usability studies using rapid-prototyping
- Conducted preliminary wear tests for fit and comfort; collected, correlated anthropometric data

Philips Healthcare – Connected Sensing, Boston, MA

January-December 2017

Mechanical Engineering Co-op

- Applied knowledge of material properties in designing a biocompatible, wearable biosensor
- Utilized rapid-prototyping techniques to fabricate samples for wear and usability studies
- Drafted and maintained mechanical models and drawings for DHF/DMR using SolidWorks
- Worked closely with engineering and industrial design to prototype iterative device mockups
- Facilitated discussion between marketing, design, and engineering re: wants vs. needs
- Interfaced with clinicians to gather customer requirements and technical feedback
- Operated under ISO13485; aided in FDA audit preparations

Johnson & Johnson – Depuy Synthes, Raynham, MA

January-August 2016

Engineering Co-op

- Worked with engineering team in both development and manufacturing of medical implants
- Increased production efficiency through implementation of Lean and Kaizen methodologies
- Familiar with medical device industry regulations; completed PFMEA/risk analysis documentation
- Utilized knowledge of investment casting and related processes in performing statistical analyses of scrap production and root cause analyses of product defects

Engineering Skills

Applications: SolidWorks, Siemens NX, MATLAB, C++, AutoCAD, MS Project, MS Excel

Prototyping: Laser Cutting, 3D-Printing (SLA, Additive), Machine Shop, Lead-Free Soldering

Portfolio Projects



E-Mina – Pop Culture Tourism App, github.com/YACT-jp/E-Mina-mobile-frontend December 2021

Mobile application for searching and sharing real-life locations from Japanese pop culture

- Led frontend development effort for key features including photo upload, gallery navigation
- Implemented user authentication and account creation using MongoDB Realm cloud services
- Researched & integrated mobile feature libraries such as React Navigation, React Native Maps
- Leveraged frontend frameworks to efficiently rapid-prototype component layout, functionality
- Facilitated communication with backend engineers regarding API endpoints, database format



Festival Finder – Interactive Map, github.com/Gabe-Goodman/Festival-Finder November 2021

Mobile-first web application guiding users to participating shops for community events

- Identified opportunity to add value within my community by leveraging my technical skills
- Executed preliminary user testing, relayed results to stakeholders during informal meetings
- Designed feature-rich, full stack SPA using modular components, Firebase, React Google Maps
- Iterated UX/UI including user authentication, favorites according to preliminary user testing



My Media Library – Personal API, github.com/Gabe-Goodman/My-Media-Library October 2021

Media API executed using Javascript, PostgreSQL as well as Java, MySQL, Amazon RDS

- Engineered a RESTful API server in Express and Node.js providing CRUD functionality
- Refactored API implementation in Java using three-tiered architecture, OOP principles
- Hosted remote SQL database using Amazon RDS, deployed API with Elastic Beanstalk