

Samir Jain

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Pursue Front End Web Developer roles in a fast-paced company where I can utilize my software development and a11y skills to improve public services or healthcare

TECHNICAL SKILLS

- Proficient: JavaScript, Node.js, React, Express, Postgres SQL, HTML/CSS, Git
- Knowledgeable: Material UI, Mocha, SolidWorks CAD, JMP, SolidWorks FEA (Finite Element Analysis)
- Some experience: Java, Python, C, ADK, LabView, Minitab, SharePoint

EXPERTISE

- Software: Full-stack Web Development, Object Oriented Programming, Computer Architecture, CPU Design, Network Protocols, Mobile App Development, Web Accessibility
- Biomechanical: Mechanical Implant Design Control, Fatigue, 3D Printing, 3D Mesh Analysis, Class 3 PMA FDA/CE Reports, Test Method Development, Fixturing, Cardiovascular/Orthopedic Anatomy
- Leadership and Community: Agile Project Management, Deaf Studies, American Sign Language

KEY PROJECTS AND RESULTS

Links on <https://sjsamphex.github.io/>

GWG – eCommerce Website Application

Feb. 2021

- Winter gear eCommerce app where customers can browse, add items to cart, and check out via Stripe. Guest carts can carry over to persistent OAuth2 login. Admin can fully create, read, update, and delete items in catalog using RESTful API. Built over 3 weeks in a 3-person team.
- Implement NERP stack: Node.js, Express, React, Postgres. Utilize ORM, JWT, OAuth2, Stripe API
- Managed a team with task atomization, delegation, pull request reviews, and testing. I built up a majority of the front-end user interface with React, Material UI, with considerations for mobile view and accessibility.

Is it Recalled? – Five-day solo Hackathon Website Application

Feb. 2021

- Developed an app to utilize multiple public API to scan food products and display recalls from FDA.

Abbott Structural Heart – Product Development Engineer of [MitraClip](#)

Dec. 2017 – Sept. 2020

- Achieved FDA approval and EU CE Mark on MitraClip G4.
- Leveraged 3D printing and other rapid prototyping techniques to quickly align interdepartmental teams on areas of improvement for test method development, fixturing, and implant design.
- Drove investigations of the failure modes of returned Implants utilizing MicroCT and 3D Mesh analysis to improve regulatory responses and development of the next Implant generation.
- Proved MitraClip 15-year lifetime through fatigue testing; drove planning, testing, and data analysis of simulated in-vivo forces over 600 million heart beats per international standards; ISO5910.
- Conducted literature and market review of cardiovascular surgical repair and dissected hearts to build knowledge base and develop anatomically relevant test methods.
- Persuaded leadership and drove migration to modern cloud storage and document technology in order to speed up communication, design, and quality report generation for regulatory compliance.

Gallaudet University Genetics Lab – [Software Development Internship](#)

May. 2014 – Aug. 2014

- Developed Python simulations of deaf populations over generations to test impact of homogenous mating on genetic frequencies
- Analyzed big data with genetic statistical tests and compared with previous academia
- Peer reviewed and published. Presented at UMD Symposium

EDUCATION

Fullstack Academy

New York City – Remote

Software Engineering Immersive

Sept. 2020 – Apr. 2021

Georgia Institute of Technology

Atlanta, GA

M.S. Biomedical Innovation and Development

Aug. 2016 – Jul. 2017

Georgia Institute of Technology

Atlanta, GA

B.S. Biomedical Engineering

Aug. 2012 – May. 2016

Minor Computer Science