# 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, PostgreSQL, 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
- 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** **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 log in can fully create, read, update, and delete items in catalog. Built over 3 weeks in a 3-person team.
- NERP stack: Node.js, Express.js, React, PostgreSQL. Utilize ORM, JSON Web Tokens, OAuth2, Stripe API
- I managed a team of three 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.

**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 porcine hearts to drive knowledge base building and development of anatomically relevant test methods
- Persuaded the R&D department and drove implementation to migrate to modern cloud storage and document editing technology in order to speed up communications, design collaboration, and quality report writing for compliance with regulatory bodies

**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