FANG W. SHEN

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EDUCATION

Nashville Software School

Vanderbilt University

B.E. Biomedical Engineering
Cum Laude Dean's List GPA: 3.74

DESIGNS & DEVICES

AccuTemp
Process & Product PDF
AccuTemp is an ambulatory temperature tracker designed to aid physicians in tracking the cyclical temperature patterns of children in infectious disease diagnoses. This device uses an Arduino chip equipped with an IR-sensor to capture light emanating from the tympanic membrane in the ear. While wearing the device, captured IR signals are converted to temperature and subsequently transmitted to a physician via Bluetooth for analysis.

Tetris-Arena
tetris-arena.firebaseapp.com
Tetris-Arena is an online single and multiplayer game developed in JavaScript / jQuery and packaged into a cross-platform web and mobile design with customized Bootstrap and Materialize SCSS. Player authentication is entirely supported by Google AUTH while game logic leverages AngularJS, for route control and a smooth single-page-access (SPA) experience, in addition to Firebase's document-based database, for storage and real-time 1 vs. 1 player action.

Galaxy-VR
galaxy-vr.herokuapp.com
Galaxy-VR is an interactive virtual tour of the Solar System that combines the use of NASA's open API data with 3D modeling and animations to render the Solar System and its planets in React-VR.

AWARDS

Healthcare Hero	(2020)
Catalyst Award	(2017)
Arnold G. Biomedical Engineering Design Finalist	(2014)
First Place Engineering Design	(2014)
Research Fellowship	(2013)

PROFILE

Languages and Frameworks: JavaScript (ES6+), TypeScript, Next, GraphQL, SQL, HTML5, CSS3, Sass, C#, .NET, Electron, Java, C++, Ruby
Libraries: React, Redux, React Testing Library, Jest, Cypress, Storybook, Material-UI, Bootstrap, Materialize, Angular
Tools: Node, Webpack, Git, Jira, Docker, Adobe Xd, Sketch, Figma, InVision, Firebase, Azure, Google Analytics / Optimize, Tableau, Sitecore, Prismic, Vercel, Buildkite

PROFESSIONAL EXPERIENCE

Senior Development Engineer: Tuft & Needle   (2021-Present)
- ⊙ Next, Node, React, Typescript, GraphQL, Storybook, Jest, React Testing Library, Chakra UI, Vercel, Buildkite, Prismic, Chromatic, Figma, Calibre
- ◎ Integrate CMS and Design System features into E-Commerce platforms across multiple international Direct-to-Consumer mattress brands (Serta, Beautyrest, and Tuft & Needle).
- ◎ Lead Google Optimize A/B experiments resulting in increased revenue, enhanced page performance, and faster navigation speed
- ◎ Implement static and server rendering strategies in Next.js for improved SEO results
- ◎ Manage designer and stakeholder expectations with high fidelity Chromatic reviews, analyses, and discussions
- ◎ Incorporate Jest, Cypress, and React tests into QA processes

Senior Digital Experience Developer: Cracker Barrel   (2021)
- ⊙ Storybook, React, Redux, Sitecore, Firebase, Azure, Figma, InVision
- ◎ Implementation of E-Commerce and Supply Chain capabilities within cross-platform web and mobile experiences to enable and support national food and retail sales.
- ◎ Lead design and engineering processes using Storybook Design System React components and Figma/InVision prototypes
- ◎ Incorporation of e-commerce and digital marketing capabilities within Sitecore/Salesforce/Facebook Pixel/MicrosoftDynamics365
- ◎ Establishment of CI/CD build and release pipelines in Azure DevOps
- ◎ Delivery of operational metrics through Firebase and Azure Analytics

Senior Solutions Developer: Ascension Technologies   (2018-2021)
- ⊙ Angular, React, Redux, Electron, C#, .NET, SQL, Tableau, Azure, AWS
- ◎ Development of greenfield solutions and national tele-health applications to support physician practice, finance, and COVID-19 patient care efforts.
- ◎ Architecture of national healthcare applications in C# .NET/ React/ Redux
- ◎ Deployment of advanced BI visualizations in Tableau Reports
- ◎ Deployment of API gateways and container-based microservices
- ◎ Contribution to SDLC with automated CI/CD pipeline

PUBLICATIONS

International Journal of Cardiology   (2013)
- ⊙ *https://www.ncbi.nlm.nih.gov/pubmed/24820736/*

Biomedical Engineering Society Annual Meeting, Seattle, WA   (2013)
- ⊙ *http://www.bmes.org/AnnualMeetingProgram.pdf*

Society for Biomaterials Annual Meeting, Boston, MA   (2013)
- ⊙ *http://abstracts.biomaterials.org/data/papers/2013/0243-000538.pdf*