ALAN THOMPSON
Software Engineer

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TECHNICAL SKILLS

JavaScript/ES6/ES7, React, Redux, Node.js, Express.js, GraphQL, RESTful API, SQL (PostgreSQL, MySQL), NoSQL (Cloud Firestore, MongoDB), Version Control (Git, GitHub), HTML5/CSS3, jQuery, AWS, Webpack, Websockets, Electron, Next.js, Gatsby, TDD/BDD (Jest, Mocha, Chai), OAuth, Agile/Scrum

PROFESSIONAL EXPERIENCE

TentaQL - Fullstack Engineer   **October 2018 – January 2019**
- Streamlined GraphQL workflow by eliminating developers' initial manual labor setup in migrating prior RESTful APIs to GraphQL
- Leveraged React's component-based architecture to maximize code modularity and reusability, and eliminate unnecessary page re-renders
- Harvested previously unknown schematic data from both SQL and NoSQL databases by creating an ES6-Promise-chained algorithm
- Used async/await pattern to asynchronously parse schemas by chaining Express middleware in order to utilize consecutive calls
- Orchestrated Node.js server with Express middleware to allow non-blocking resolution of promise-based controllers, and ensure separation of concerns by modularizing code blocks, while interconnecting relational database with client rendering React interface
- Applied functional programming paradigm to ensure purity and immutability of output of functions utilizing previously reconstructed schema, to instantiate an adaptive GraphQL server with CRUD functionality which supports circular relationships of GraphQL types
- Orchestrated Redux event dispatching workflow to implement asynchronous data fetching and text-editor fluxing for non-blocking, consistent UI/UX

Mt. Sinai - St. Luke's Hospital   **2007 - 2018**
- Applied communimetric algorithmic assessment tools for data analysis to direct treatment decisions and track behavioral progress of patients
- Supervised up to 20 providers from multiple city-wide agencies to ensure appropriate treatment decisions were implemented and utilized effectively

MusicShapes Creative Arts Therapy, PLLC | **Founder & Creative Technology Director**   **2004 - 2018**
- Founded PLLC to serve individuals with emotional, physical, developmental, and social needs through creative musical experiences to promote growth, development, and increasing quality of life
- Designed and maintain responsive site using HTML/CSS while implementing Ajax crawling on escaped fragmented source code to optimize SEO
- Created a relational database (MySQL with GUI) to establish & track relationships between grants, contracts, & agencies

International Data Group (IDG) | **Web Analytics**   **2000 - 2002**
- Generated data visualizations and SEO performance analytics for digital assets in order to monitor real-time responsiveness
- Utilized Raster editor and OOP-based integrated development environment to implement SWF streaming and embedding and render vector graphics
- Performed Web Data Extraction using GUI interface to consolidate and compile to monitor SEO performance for IDG.net

OPEN SOURCE WORK

PSQL and NoSQL Browser-Based Database Management System | Software Engineer   **2018**
- Utilized React Tables to render lightweight, extendable SQL databases with HOCs to implement auto-generation of query data
- Used recursive React components to traverse virtual DOM to extract data and construct front-end representation of nested NoSQL documents
- Implemented GitHub OAuth using Node.js Passport module to allow users to access and execute past queries without unnecessary dependencies
- Dynamically generated NoSQL schemas to be used in conjunction with NoSQL Object Relational Mapping to enable full CRUD operations

SPA Webpack Configuration Generator | Software Engineer   **2016**
- Architected Node.js server with customized Express middleware using MVC design pattern to modularize routing and establish seamless flow of data between client request, database transactions, and server responses
- Used React's component-based architecture to leverage component reusability and modularity to create a client-facing GUI in order to render exported webpack.config.js file in accordance with client specs
- Utilized Node.js fs module with Express server middleware to facilitate asynchronous interactions with client filesystem in order to dynamically generate customized build configuration file, package.json and optional templated components in downloadable, lossless file format

EDUCATION

Codesmith | New York, NY | Software Engineering Residency   **2018**
New York University | New York, NY | Masters of Arts   **2004**
San Francisco State University | San Francisco, CA | Bachelors of Science   **2000**

PUBLIC SPEAKING | TECH TALKS

Build With Code: NYC | *Is GraphQL overhyped or the future of API design?*   **2018**

PASSIONS & INTERESTS

Jazz Piano | Music Therapy | Perfecting curry & salsa recipes | Plants | Robotic dance moves | Cartophile | NPR listening | Documentaries