William Woodruff
Senior Full Stack Developer ([JSNSD](#)) (cv v2.06)

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Certificate

- The [JSNSD](#) (OpenJS Node.js Services Developer) certificate is awarded by the [Linux Foundation](#), signifies competency creating RESTful Node.js Servers and Services (or Microservices), provides particular emphasis on security practices.

Skillsets

Web Front-End

- React / React Native / TypeScript
- Dockerfiles, building and running
- Webpack, babel, tsc
- JS / CSS / HTML
- Three.js, React Three Fiber, Mozilla hubs
- Effective state management implementations for tricky features
- Keen eye for implementing designs and coordinating effective animations if called-for.

Web Back-End

- Node / hapi / Express
- Security-focused, always use input validation, even at function level if on a sensitive code path
- Knowledge about encryption: Familiar with the gpg cli and asymmetric, symmetric encryption, different algos for encryption like ECC curve25519
- SSE / websockets networking
- 3rd party REST API integrations
- AWS hosting

- Testing frameworks like Jest, React Testing Library
- Flamegraph collection and analysis via browser perf devtools
- PostgreSQL / MySQL
- Testing frameworks / tools like mocha, sinon, chai
- Flamegraph collection and analysis via [Node Clinic](#)

Work

Senior Full Stack Developer @ [Alakazam.io](#)
Jan 2022 — Present (1 yr, 5 mos)

Alakazam is a Metaverse company poised to disrupt the market by providing affordable self-service Metaverse management solutions for monthly subscribers. I have enjoyed contributing directly to their success in fundraising and gaining recognition via my leadership and direct code contributions, particularly in overseeing and implementing a significant UI overhaul written in React. With my leadership and the help of the team, Alakazam has been featured as a portfolio company of the esteemed [Maine Venture Fund](#), has garnered attention from prominent publications such as [MaineBiz](#) and the [Portland Press Herald](#).

Highlights

- Implemented a full crypto purchase cycle using walletconnect and other tools to enable a 3D online shopping experience inside the Metaverse. This included managing complex state (versions and combinations of products), and careful SKU management. As we see with PCI compliance, user info during purchases must be taken extra-special care of, including managing encrypting sensitive user information such as PII and payment information.
- Contributed to the base CI/CD setup to manage our launches and process.
- Successfully lead the effort for implementing the Alakazam UI overhaul for our in-house [Mozilla Hubs](#) fork. This includes the main Lobby and in-room UIs. You can see a video of it in action in this [tweet](#), and try it out yourself at https://app.alakazam.io/yjnqZq5/vibes. Compare with the base hubs UI (our starting point) which you can find [here](#).
- Co-hosted and presented as representative for the company and Mozilla Hubs community meetup for Alakazam, highlighting our customizations to the base Hubs offering, which the hubs team themselves were huge fans of.

- Built and exported a crew of diverse custom avatars for our base customer offering using the [Ready Player Me](#) customization engine. Contributed to team in Art Direction and diversity.
- With a very tight timeline and zero Elixir knowledge, I built and shipped core features powering the web backend engine. With help of team members I was able to get up-to-speed on idiomatic Elixir within a couple days.
- Invented a room state system that self-manages maintaining shared state across all users in a shared room, using existing websocket connections.
- Worked on ideas and POCs for how to add games and support interactable elements in Mozilla Hubs.

Full Stack Developer @ [Big Room Studios](#)
Aug 2015 — Jan 2022 (6 yrs, 6 mos)

Big Room Studios has received numerous project grants from [Maine Technology Institute](#), and has been considered among the most talented web development studios in Portland, Maine since 2002.

Highlights

- Worked on a variety of client projects, with security always being a major focus for our architecture.
- Node.js REST API, React, React Native and Redux web development, AWS hosting maintenance. I played an impactful role on the core team during initial app development for the following projects:

Projects

- [Nearpeer](#) ([about](#)) - College social networking app used by major colleges like LSU, Xavier, and others across the country to this day. Nearpeer uses Twilio to bring live group chat and DMs to college students to improve their sense of community and belonging. Worked extensively on the front and back-ends, and ran the project solo during its maintainenance phase.
- [JobsInTheUS](#) – Job portal with an extensive Application Tracking System, and an Elastic Search implementation for searching across millions of jobs across the country. Worked

extensively on their new UI and job import bot system, which downloaded and indexed about a million jobs per day. Maintained this app solo after initial development as well.

- [Architalx](#) – Beautiful, content managed, architectural conference website built on Wordpress with custom php. Successfully lead this project, working closely with our staff designer to bring a dynamic design to life. Implemented an interesting way to write modularized php code for this project. Site and template are still in use and working to sell conference tickets!
- [LawHUB](#) – Cloud-based dashboard launched by the New York State Bar Association in collaboration with CuroLegal and Big Room Studios, to create a first-of-its-kind application for lawyers to consolidate access to 3rd-party services related to their practice into one dashboard. Services among others included Clio, Fastcase, LawPay, and Google Calendar. This was my first project at Big Room Studios. Began as a core team member working underneath another developer, and then demonstrated proficiency to take over as lead, bringing the project to successful completion. The application won an NABE Luminary Award for [Excellence in Websites](#) in 2016.

Volunteer

Development Contributions @ [CYWOC](#) (Coded by Young Women of Color)
Jan 2021 — Dec 2022 (2 yrs)

CYWOC is a Tech Education non-profit with focus to bring VR and top emerging tech to the black women of color community via funded education, with community reachout achieved through engaging events!

Highlights

- Exhibition A was a part of the 2022 Tribeca Film Festival
  https://tribecafilm.com/films/exhibition-a-2022
- Exhibition A was also part of the 2022 Tribeca Film Festival's Juneteenth event
  https://tribecafilm.com/juneteenth
- Helped facilitate the Exhibition A interactive VR show at designated show times by preparing equipment for, and practicing with, performance artists who guided users through the experience in VR.
- Participated in development of the [CYWOC website](#).

- For a short time, worked on community leadership by initiating and engaging in conversations in Slack with CYWOC collaborators and volunteers.

Interests

- Comedy
- Video games (Destiny 2, Halo, COD)
- Snowboarding

AI / ChatGPT API work for [Chappy](#) project

- Project is on-hold due to funding limitations
- Chatbot personality development
- Invented composable preprompting technique
- Invented control syntax technique for chatbot to call server functions
- Multimodal chatbot experience using control syntax. Chappy is able to generate images based on user requests using the Replicate API.
- Experimenting with AI screenplays