## DUSTIN SMOOTE

Front-End Creative Web Developer

Portfolio: www.dustinsmoote.com

Email: dustinsmoote@gmail.com Phone: +1 (423) 313-6533

Location: From: Chattanooga, TN, USA Current: Buenos Aires, AR

Spoken Languages: English (native), Spanish (B1)

Socials: <u>Github</u> <u>LinkedIn</u>

### Education

Bachelor of Science -BS, Computer Engineering **University of Tennessee** 2014 - 2019

Associates of Arts and Sciences-AAS, General Studies **Chattanooga State Comm. College** 2012 - 2014

# Technologies Used:

AI: Langchain.js, OpenAi API, Weaviate

### Web Dev:

HTML/CSS, Javascript/Typescript, GSAP, Next.js, React.js, Nuxt.js, Vue.js, Tailwind.css, Sass/Scss, Craft CMS, Webflow CMS, Wagtail CMS, Docker, Webpack, Node, Nest.js, Prisma, Playwright, Jest

### 3D Animation / Game Dev:

Three.js, GLSL/WebGL, React-Three-Fiber, Drei, Babylon.js, Cannon.js, Blender, Unity/C#, Steam API

**Mobile Dev:** React Native, Expo, RevCat, Android SDK/Java, XCode/Swift

**Web Design:** Figma, Adobe Photoshop

# Professional Work:

## Front-End Creative Developer at Triptych

September 2019- Current

Projects List: (chronological - newest first)

### Triptych: 2024 Agency Website (view site)

- Led the development of the 3D website experience using React-Three-Fiber and custom GLSL shaders to enhance visual effects and transitions.
- Integrated a Next.js application into Webflow, optimizing the platform for dynamic content management.
- Received Honorable Mention on Awwwards and won the 'Muzli Pick' design award.

### Robin Knows: AI-Driven Mobile App (view site)

- Led R&D for implementing the core functionality of the LLM logic for the app, creating a model-agnostic framework using Langchain.js.
- Setup long-term conversational memory, context analysis, RAG vector database with private documentation, web-scraping, prompt template output parsing for an LLM.
- Built a chat interface and UI within a cross-platform mobile app, using React Native and Expo - supporting text, image, and audio throughput via WebSocket connections with an LLM.

### Wind River: Luxury Tiny Homes Virtual Showroom (view site)

- Created an interactive 360° viewing experience for a luxury tiny home builder using React-Three-Fiber.
- Developed a dynamic product lookup system with custom tooltips and real-time data integration from Webflow CMS.
- Optimized 3D scene performance for high-quality rendering across devices.

### Lumber Marketplace: E-Commerce Platform (view site)

- Constructed REST API communication between a custom Nest.js backend and Next.js-based dashboards for e-commerce functionality.
- Implemented real-time data synchronization with a custom database and the ArcBest API and setup dynamic filtering system for product lookup tables, based on geolocation.
- Developed complex UX patterns for users to manage the buying and selling process of real-world, large-quantity lumber transactions.

### FBI SOS: Browser-Based Educational Video Game (view site)

- Developed a browser-based educational game using Next.js and React-Three-Fiber, focused on teaching internet safety to students.
- Implemented real-time physics engine, using Cannon.js, for player controls and gameplay mechanics.
- Optimized performance to maintain a seamless 60-120 FPS experience across desktop, tablet, and mobile platforms.

(projects list continued on the next page.)

### Professional Work Cont'd:

#### Creative Discovery Museum: Robot Configurator Game / Museum Installation (view article)

- Setup 3D environments, assets, and materials for each level of gameplay, using Babylon.js.
- Setup raycasting functionality and animation events for interactions within the 3D scenes.
- Setup global state management for app-wide game logic.

### Mastercard: Common Ground Interactive Website (view site)

- Created an interactive, horizontal scroll navigation featured on the landing page, animated with GSAP and ScrollTrigger.
- Developed UI and implemented parallax and scroll-based animations throughout the experience.

### Meta: Main Street Virtual Marketplace (view site).

- Led development of the 3D scene, working closely with 3D designers in order to create the experience.
- Implemented mesh instancing scheme for optimal performance by reducing draw calls when rendering a large set of repeated assets within a complex scene.
- Implemented custom raycasting solution and animation system for intuitive point-and-click navigation.
- Created particle systems for snow, falling leaves, bees, and fireflies for seasonal variations of the experience.

#### Volkswagen: Fuel Efficiency Car Configurator Game / Museum Installation (view site)

- Setup controls and static camera views for the intro and outro cut scenes.
- Configured meshes within the scene to toggle mesh transparency based on user selections.
- Developed UI, animations, and functionality optimized for a large touch-screen monitor

#### Sanctavia: Interactive Wellness Training Website (view site)

- Created dynamic data structures in Craft CMS and implemented them into a Nuxt.js application
- Created stylized water and caustics, using Three.js and custom WebGL shaders
- Developed a system for managing animation events during interactions within the scene, using GSAP.

#### EPB: Customer Dashboard and Website Redesign (view site)

- Developed modular UI components using vanilla JavaScript and dynamic page templates using Python/Django.
- Integrated real-time customer data into a user-facing dashboard via the Wagtail CMS.
- Built REST API endpoints for seamless communication between the front-end and back-end systems.

### Panasonic: Universal Lighting Technologies (ULT) Website Redesign (view article)

- Developed a modern, responsive client-facing website using Nuxt.js and Craft CMS.
- Implemented UI animations using GSAP to enhance the user experience and ensure a visually cohesive design.
- Collaborated closely with back-end developers to integrate a large, real-time inventory database into a lookup table..

### Spare Teeth VR: Minigolf/Bowling Video Game (view site)

- Developed gameplay mechanics and state logic using C# within the Unity Engine for a VR game.
- Integrated the Steam API to track user achievements and data, adding a gamification layer to the experience.
- Implemented event-based interactions with NPCs and game objects within virtual environments.

### JRadio: Music Streaming Platform (Website and Mobile App) (view site)

- Integrated an audio streaming interface and global state management for real-time streaming across mobile and web platforms.
- Developed playlist creation and management features using React Native and Expo for mobile, and a PWA for web.
- Created a cohesive UI design, ensuring seamless functionality across both web and mobile applications.

### North Face: Immersive AR Mobile Experience (view site)

- Developed an augmented reality (AR) mobile experience using Vue.js and Three.js to promote the FUTURELIGHT™ product line.
- Implemented gyroscopic motion and touch controls for 3D navigation, allowing users to explore Mt. Lhotse with interactive 360° views.
- Awarded 'FWA Site of the Day' and 'The Mobile Site of the Week' on Awwwards.