

ANDREA ROMERA COSTA

FRONTEND DEVELOPER

Available for remote and on-site roles in Spain and across the European Union.

WORK EXPERIENCE

Freelance Frontend Developer at Studio Vi

[September 2024 - January 2025]

<https://www.studiovi.com/solution/virtual-agents-in-public-spaces/>

An AI-powered virtual agent solution designed for deployment in public spaces across multiple business sectors, including healthcare, transportation, retail, and hospitality. The project delivers interactive, kiosk-based and web interfaces that combine conversational AI with rich, animation-driven user experiences. It emphasizes scalable frontend architectures, responsive design, and seamless integration between UI layers and intelligent systems to support real-world, high-traffic environments.

- Designed and implemented a complex, animation-rich AI chatbot interface using HTML and CSS, translating detailed design specifications into a cohesive layout while ensuring strict adherence to UI guidelines and visual consistency.
- Built a flexible JSON-based configuration system enabling non-technical users to modify chatbot behavior based on contextual rules.
- Defined and maintained explicit UI states for user presence, proximity, and inactivity using **Browser APIs**, including the Camera API and Web Speech API, to ensure predictable and coherent interaction flows.

MOST RECENT PROJECTS

React Library - Azeriand's Library

[2025]

<https://library.andrearc.com/>

- Architected a reusable React **component library** with extensively configurable props, adhering to modular design principles and enforcing consistent styling via **Tailwind CSS**.
- Configured Storybook **design system** as an interactive environment for component documentation and visual testing, enabling real-time customization through dynamic controls.
- Enforced **accessibility** best practices by implementing ARIA roles and comprehensive keyboard navigation to ensure full screen reader compatibility.
- Built a React Context-based theming system enabling **external customization** of the library, with support for light/dark modes and dynamic styling.
- Established **TypeScript** configuration to ensure strict type safety and long-term scalability.
- Authored detailed component documentation with practical usage examples and implemented unit testing to safeguard code quality, stability, and reliability.

React App - Fitness App

[2024]

<https://fitness.andrearc.com/>

- Architected and implemented scalable, reusable UI components leveraging modern frontend patterns and third-party libraries to enhance consistency, maintainability, and performance.
- Orchestrated global **state management** through custom React Contexts and React Hooks, ensuring predictable data flow and optimized state updates.
- Delivered **responsive design**, device-adaptive interfaces using media queries and dynamically computed CSS classes.

- Implemented persistent caching via **PWA**, **useLocalStorage**, and other **Browser APIs** and custom hooks to preserve data across user sessions.
- Elevated overall user experience through user-centered interface design, with a strong emphasis on usability, accessibility compliance, and visual coherence achieved through a custom-built UI library.

SKILLS

Technologies: HTML5, CSS3, JavaScript, React.js, Git, GitHub, Tailwind CSS, Visual Studio Code.

Languages: English, Spanish, Catalan.

Education: Frontend Development, Programming with JavaScript, Version Control, HTML and CSS in depth, React - Courses authorised by Meta (Coursera).