Rayyan Huda

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Technical Skills

Languages: Python, Java, C++, JavaScript, HTML/CSS, SQL, MATLAB
Tools/Frameworks: Figma, React, Node.js, Next.js, Three.js, MySQL, TailwindCSS, Vite, Git, Jira

Education

University of Waterloo **Sep. 2024 – Apr. 2029**
*Bachelor of Applied Sciences in Systems Design Engineering — **GPA: 3.5/4.0*** *Waterloo, ON*
Relevant Coursework: Data Structures and Algorithms, Digital Computation, Digital Systems

Experience

Front-end Developer **January 2025 – April 2025**
Rhythm & Blues Cambridge *Cambridge, ON*

- Developed and deployed multiple front-end components using HTML, CSS, and vanilla JavaScript, contributing to a **35%** increase in site visitations and improved cross-browser compatibility
- Designed **10+** responsive webpage wireframes and high-fidelity mockups in **Figma**, incorporating board directors' feedback, to focus on UX development and improve site structure.
- Optimized UI/UX for accessibility and SEO by implementing semantic HTML and ARIA roles, resulting in a **40%** improvement in Lighthouse scores, increased search visibility by **35%**, and longer user engagement.

Co-Chair & Co-Founder **February 2025 – Present**
FormulaTech Hacks *Waterloo, ON*

- Organizing a motorsport-themed hackathon, driving participation from post-secondary students and managing a cross-functional team of **30+** members, overseeing development, design, logistics, marketing, and sponsorships.
- Leading brand development, digital presence, and strategic partnerships with tech sponsors to enable hardware, software, and CAD-based innovation tracks.
- Initiated team development by defining key roles and recruiting core members; designed foundational branding elements, including the original logo and launch Instagram posts to establish a cohesive and recognizable identity.

Projects

AI Voice Assistant | *Python, Deepseek LLM, Google Web Speech API, Pyttsx3* **/ai-voice-assistant**

- Developed a conversational **AI system** by integrating **speech recognition** and **text-to-speech** libraries with **local LLM inference**, resulting in a responsive voice assistant.
- Implemented transcription and summarized conversation titles via **prompt engineering**, to create an automated conversation archiving system, storing interactions in both JSON and TXT formats.
- Engineered a **command recognition framework**, enabling the AI to execute online tasks (e.g. searching YouTube), from **natural language prompts**.

Movies Search Application | *React, Vite, Node.js, React Router, TMDb API* **/movies-search**

- Developed a responsive single-page application using **React**, **Vite**, **Node.js**, and **React Router DOM**, implementing client-side routing and dynamic rendering of data from The Movie Database (TMDb) API.
- Utilized **React Context API** and **custom hooks** to manage application state for user-selected favorites, with **localStorage integration** for persistent user experience.
- Integrated **asynchronous data fetching** with **async/await** and **fetch API** to retrieve movie data from TMDb, implementing error handling and loading states with React **useState** and **useEffect** hooks.

Gym Workout Generator Web Application | *React, Vite, TaildwindCSS, React Router, JavaScript* **/gym-app**

- Built a full-stack single-page fitness application using **React**, **Vite**, and **Node.js**, generating personalized workout routines with a sets counter and recommendations for repetitions, rest, and tempo.
- Managed global state using **React Context API** and custom hooks, with **localStorage** persistence for workout tracking and user preferences.
- Deployed on **Netlify**, handling fast load times and **client-side routing**; designed app for future database integration and server expansion.

Portfolio Website | *HTML, CSS, JavaScript, jQuery, Three.js* **/portfolio-website**

- Developed a fully responsive website using **HTML**, **CSS**, **JavaScript**, and **jQuery**, implementing reusable UI components with hover effects, dynamic animations, and DOM-based interactivity.
- Integrated **Three.js** to render interactive 3D models exported from SolidWorks, allowing orbit, zoom, and pan manipulation with detailed exploration of the mechanical designs.
- Optimized load times, site security, and performance, achieving a **99%** Lighthouse performance score, **85%** accessibility rating, and **0.6 second** speed index.