Jaewon Yang

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HIGHLIGHTS

- Possessing over 1+ year of experience in Web Development and proficient in Software Development.
- A Highly organized and results-focused tech leader, leading a team of 6 to 8 developer members.
- Successfully deployed an interactive web XR lecture platform featuring a 3D avatar with inverse kinematics.
- An eager team collaborator committed to addressing project challenges and following coding best practices.
- Proficient in Agile software development methodologies with hands-on experience.

WORK EXPERIENCES

Software Developer, VARLab Conestoga College, Waterloo   **Sept 2022 – Present**

- Developed an advanced web XR lecture space for Conestoga College, fostering students with an unparalleled immersive learning experience.
- Established an automated asset optimization that efficiently compresses 3D assets into various formats, tailored to the specific needs and preferences of different platforms and technologies.
- Made valuable contributions to early-stage research and development initiatives, effectively transitioning them into fully-fledged, official in-house projects.

HACKATHON EXPERIENCES

Bell Geekfest Hackathon 2023   **22-24 Sept 2023**

Participated in 3-day hackathon focused on creating technology solutions for Privacy & Cyber Attack topics.

- Develop the privacy protection Chrome extension that employs React and Vite for the front end, with a Flask backend implemented in Python utilizing the OpenAI API.

PROJECT EXPERIENCES

vConestoga–VARLab

- An in-house immersive lecture platform for Conestoga college–Built with JavaScript, Three.js and Node.js.
- Developed advanced VR feature for avatar arm inverse kinematics, elevating the immersive experience of avatars–Built with JavaScript and Three.js with foundational inverse kinematic physics.
- Implemented a desktop avatar head, face, and hand tracking feature, delivering a VR-level experience–Built with MediaPipe API, JavaScript, and Three.js.

Lecture Entry Point Portal–vConestoga

- The primary entry point for lectures using the MERN stack and implemented LTI Authentication seamlessly integrating with D2L for a secure and streamlined user experience. –MongoDB, Expressjs, React and Nodejs.
- Optimized system efficiency, reducing page load time by 15% and improving backend response rate by 20%.

WebXR Educational Simulation–vConestoga

- An immersive webXR educational simulation for conflict resolution and proper escalation–Built with Three.js for 3D background, React frontend UI and Microsoft Playfab user analytics.
- Resulted in 30% better performance and facilitated detailed analytics for precise data extraction.

Automated Asset Optimization–vConestoga

- An automated asset optimization that converts heavy existing assets to optimized assets for the webXR environment–Built with Electron, KTX Software, and glTF-transform SDK.
- Conversion and Compression system that revolutionized our workflow. By enabling the seamless conversion and compression of over 50+ assets with a single click, achieved a remarkable 99% success rate and reduced processing time by 95%.

EDUCATION

Computer Programming and Analysis–Conestoga College–Co-op–GPA 3.93/4.00   **Sept 2020 – Present**
Expected Graduation: April 2024

SKILLS & INTERESTS

Software: JavaScript, TypeScript, Three.js, Node.js, React.js, Java, C#, ASP.NET, Tailwind CSS, Firebase, MongoDB, Git, Electron, Python, Next.js, Yarn, Bootstrap, Vite, Webpack, Feathers.js, SQL, Jira, Confluence, Bitbucket, Slack, Asana
Interests: Badminton, Golf, Hiking, Camping, Video Game, Music, New Technologies.