

Jaewon Yang

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HIGHLIGHTS

- Possesses over two years of experience in web development, skilled in Software Development.
- Implemented immersive webXR environment with a 3D avatar with applied Inverse Kinematic.
- Innovative developer with a passion for learning and adapting to new technologies.
- Enthusiastic team player dedicated to resolving project issues and meeting code standards.
- Collaborated in reviewing code, software testing, and documentation throughout the project lifecycle.
- Proficient in Agile software development methodologies with hands-on experience.

WORK EXPERIENCES

Jr. Software Developer, VARLab Conestoga College, Waterloo Sept 2022 – Present

- Developed an advanced webXR 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.

IT Desktop Support Technician, St. Mary's General Hospital, Kitchener May 2022 – Sept 2022

- Played a key role in the Windows 10 upgrade project, managing the smooth transition from outdated PCs to the hospital's standardized image in an impressive timeframe of just 2 months.
- Diagnosed system errors and other technical issues and effectively resolved them.

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.
- 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 MS Playfab 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 88%.

EDUCATION

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

SKILLS & INTERESTS

Software: (Proficient): JavaScript, TypeScript, Three.js, Node.js, React.js, Tailwind CSS, Firebase, MongoDB, Git
(Familiar): Electron, Python, C#, Java, Next.js, Yarn, Bootstrap, jQuery, Vite, Webpack, Feathers.js, SQL.

Interests: Badminton, Golf, Camping, Video Game, Music, New Technologies.