Daniel Yoo

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University of California, San Diego **San Diego, CA**
B.S. in Mathematics-Computer Science, 3.4 GPA *June 2023*

Languages: Java, JavaScript, TypeScript, HTML/CSS, C++, C#, Python, GLSL, Swift

Frameworks/Tools/APIs: React, Angular, Svelte, Next, Node, Hasura, SQL, Azure Functions, Postgres, Netlify, GraphQL, Git, Jira, Vim, LaTeX, OpenGL, OSGi

WORK EXPERIENCE

The Immersive Company **Los Angeles, CA**
Software Engineer (Contract) *October 2024*
- Built an interactive 3D intro sequence for a flagship VR immersive video app in RealityKit/visionOS
- Engineered a custom animation engine leveraging 3D Bézier curves for smooth and dynamic visuals
- Contributed to a company with an established partnership with Major League Baseball (MLB), enhancing interactive experiences in sports and entertainment

Stealth Startup **Brea, CA**
Software Engineer (Contract) *March 2024 - June 2024*
- Designed and implemented intuitive user-facing pages in Angular for a school admin tool
- Architected end-to-end services using Azure functions and an Azure SQL database

Liferay, Inc. **Diamond Bar, CA**
Associate Software Consultant *May 2023 - Dec 2023*
- Advised third-party clients on optimal strategies for leveraging Liferay DXP to meet their specific functional needs
- Delivered multiple projects using React, Freemarker, and SCSS to create user-friendly components
- Applied agile development methodologies and SDLC best practices to effectively manage tasks and deliverables
- Collaborated in a continuous integration environment, utilizing GitHub Actions to streamline development and deployment processes

PERSONAL PROJECTS - see full list at danielnyoo.com

Imp Engine (formerly svo-raytracer) **OpenGL, Java**
- Developed a realtime Java/LWJGL voxel path tracer engine based on *Efficient Sparse Voxel Octrees*
- Engine supports vast worlds up to 8192^3 (549 billion voxels), utilizing a custom octree layout for optimal memory coherency and rapid ray traversal
- Created a full suite of SDF-based tools for efficient voxel editing
- Designed a unique hybrid rendering pipeline that seamlessly integrates ray-marched voxels with rasterized models, ensuring correct depth sorting and a coherent visual output
- Engine also features support for particle systems, UDP multiplayer networking, 2D sprite rendering, sprite font rendering, and 3D collisions/kinematics, providing a robust platform for dynamic and interactive environments

Fearsha **React, TypeScript, Next**
- Developed a React/TypeScript front-end for a payment and booking service tailored to day-of bookings and stat tracking in the escape games niche
- Optimized SEO through server-side rendering using Next.js
- Integrated Stripe for secure and seamless payment processing, enhancing the overall booking experience