Kyle Zhao

kzz@sfu.ca | zhaokyle.com | linkedin.com/in/kyle | github.com/kylezhao101 | +1 (778)-883-0313

Education

Simon Fraser University

Burnaby, BC

Bachelor of Science in Interactive Arts and Technology

Sep 2021 - Present

Technical Skills

Languages: HTML/CSS, JavaScript, TypeScript, PHP, Python, C, Java

Frameworks and Libraries: React, Next.js, Tailwind, jQuery, AJAX, D3.js, Express.js, Node.js, Flask

Databases: Firebase, MongoDB, MySQL, SQLite

Other Technologies: Native Android, Pytorch, MATLAB, Tableau, Vega-Lite, Arduino, Cypress, Postman

Design Tools: Figma, Adobe Photoshop, Rhino 7, Onshape

Experience

Fullstack Developer Co-op

May 2024 - Present

Vancouver Chinese Film Festival

Vancouver, BC

- Developed a networking/portfolio platform for filmmakers using Next.js, PostgreSQL, and Stripe, enhancing interactions with React.js libraries, Cypress, and Postman for automated testing.
- Implemented PostgreSQL row-level security and S3 storage buckets, reducing page load time by over 25% through backend WebP conversion for user-submitted media
- Maintained a WordPress site, implementing form submissions, event ticketing, and SEO and performance optimizations, increasing page views by 30%.

Graphic Designer Aug 2022 – Present

SFU Esports Association

Burnaby, BC

- Creating social media and event visuals for a 3,600-member Discord community in collaboration with club executives.
- Designed 40+ tailored social media banners using Adobe Photoshop to improve SFU competitive esports players' brand presence while maintaining active communication for feedback.
- Creating specialized graphics for cross-university collaborations while working alongside event organizers.

Projects

Resume REST API & Docs Site Generator | MongoDB, Express, Node.js, Next.js, MDX, Postman | Apr - May 2024

- Deployed and tested endpoints for resume management with create, read, update, and delete functionalities.
- Ensured security through key authentication, allowing only authorized access to data modification endpoints.
- Integrated dynamic Next.js site generation with MDX markdown files for automatic creation of blog pages.
- Completely automated the generation of site navigation elements based on MDX folder structure, reducing development time for navigation elements by 100%.

- Achieved 97% accuracy in differentiating between two visually similar cancer types in lung histopathology images.
- Fine-tuned preprocessing and learning rates, using performance metrics such as confusion matrix and F1 score to debug and address classification bias.
- Managed a GitHub repository in a team of four, resolved merge conflicts, and ensured project continuity.

Fit Foodie App | Native Android, Google Maps SDK, SQLite, Material 3 |

Feb – Apr 2024

- Designed a mobile UI and integrated a gamification system, merging fitness goals with engaging gaming elements.
- Developed a foreground service for real-time GPS and exercise tracking, enabling offline and off-screen live tracking.
- Implemented real-time calorie calculations using weight, duration, and speed to determine metabolic equivalents.
- Created a SQLite database handler for managing exercise sessions and gacha mechanics.

Va11-halla Fansite | Figma, React, Firebase, Tailwind, Three.js, Python, Blender |

Aug 2023

- Redesigned the Vall-halla game's recipe UI in Figma for better readability and user experience, focusing on scannability and simplified comparisons with vibrant cyberpunk aesthetics.
- Implemented a dynamic search and filter, optimized with memoization to prevent unnecessary UI re-renders.
- Designed detailed voxel art with MagicaVoxel, optimized geometry and baked it in Blender for enhanced visual performance, and rendered with Three.js at 144 fps.
- Wrote a Python script for the automated addition of 29 drink recipes to Firestore through web scraping and using an external library for Firebase integration.