JESSICA WAN

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https://jjesswan.github.io/portfolio/

EDUCATION:

Brown University, *Providence RI | Computer Science Sc.B*   *(Fall 2020 - est. May 2024)*
- *Relevant Coursework:* Introduction to Object Oriented Programming, Program Design with Data Structures and Algorithms, Statistical Methods, Introduction to Computer Graphics, UI/UX | *Upcoming Coursework:* Introduction to Software Engineering, Discrete Structures and Probability

SKILLS:

- **Computer Languages:** Java, Python, C++, HTML, CSS, Javascript, R
- **Skills:** Git, React, Figma, Balsamiq Wireframes, Adobe Photoshop, Microsoft Suite, Digital Art and Graphic Design
- **Languages:** English (native), Mandarin (conversational)

RECENT CODING PROJECTS:

- Realtime Graphics   *(2022, C++)*
    - A real-time scene viewer using OpenGL API and the real-time graphics pipeline. Allows for real-time shape manipulation, camera movement, and post-processing features. Features GLSL shaders and framebuffers.
- RayTracer   *(2022, C++)*
    - Ray tracing software that allows realistic processing and rendering of complex 2D images from 3D scenes. Encompasses the Phong illumination model, mirror reflections, and texture mapping.
- Brush & Filter 2D   *(2022, C++)*
    - A painting and filter application that enables multiple types of brushes, allowing users to paint on a 2D canvas as well as apply filters on their painting or imported images.
- Search Engine   *(2022, Python)*
    - Programmed a terminal-based search engine returning relevant results from user-inputted query. Parses various sizes of XML-formatted Wikipedia articles and utilized REPL to prompt user interaction.
- Sketchy   *(2021, Java)*
    - Programmed a simplified version of Microsoft Paint using Java and extensive JavaFX packages
    - Features shape creation and selection using mouse, button, and keyboard interaction. Additionally featured mouse interaction to enable line drawing and shape manipulation. Enables save/load function of drawing files

WORK EXPERIENCE:

- **Teachers Assistant,**   *(Aug 2022 - Dec 2022)*
Brown CSCI 0150 – Intro to Object Oriented Programming with Prof. Andy van Dam:
    - Developed class materials and teaching strategies to facilitate learning of fundamental OOP and Java concepts
    - Assisted students in project design, development, and debugging, as well as general learning objectives to encourage success and passion toward the course
    - Held section and lab hours to both reinforce class concepts and introduce new material
- **Data Assistant**, *Survey Research Center at Brown University School of Public Health:*   *(Jun 2022 - Aug 2022)*
    - Designed and implemented custom Javascript-powered user interface within the Qualtrics survey engine to optimize participant experience for large-scale research endeavors
        - Interacted with Qualtrics API and existing framework to develop effective mechanisms ensuring survey security and session confidentiality for high school participants
    - Compiled and reviewed large quantities of research data for better accessibility and effective analysis.

COMMUNITY OUTREACH:

- **Community Coordinator**, *Brown Residential Life:*   *(Aug 2022 - Present)*
    - Works with residents, peer student staff, and Area Coordinators to create a vibrant, engaging, and respectful residential community. Facilitates community conversations and positive change. Supports students' needs and endeavors while fostering an inclusive environment via programming and community bonding activities
- **Executive Board**, *Snail Mail @ Brown:*   *(Jan 2022 - May 2022)*
    - Designed and distributed promotional material for club meetings and community events. Collaborated with other team members and Brown student organizations to create a meaningful and authentic club experience