JESSICA WAN

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EDUCATION:

Brown University, *Providence RI | Computer Science Sc.B*   *(Fall 2020 - est. May 2024)*
- *Relevant Coursework:* 3D Game Engine Development, 2D Game Engine Development, Computational Photography, Intro to Computer Graphics, UI/UX, Software Engineering, Intro to Object Oriented Programming, Program Design with Data Structures and Algorithms

SKILLS:
- **Computer Languages:** Java, Python, C++, React, Vue, HTML, CSS, Javascript, R
- **Skills:** Git, SourceTree, Figma, Atlassian/Jira, Balsamiq Wireframes, Adobe Photoshop, Blender, Digital Art
- **Languages:** English, Mandarin Chinese

RECENT CODING PROJECTS:

jessicawan.vercel.app/mywork
- Syntax App   *(2023, Java, React)*
  - Full-stack speed-typing interface focused on helping users become more proficient at typing code syntax.
  - Uses GPT-3 API to supplement code snippets with AI-generated conceptual explanations of code.
- Ninja Mouse (3D Game Engine)   *(2023, C++)*
  - Custom built 3D game engine supporting industry properties, such as collision detection, pathfinding, artificial intelligence, camera manipulation and rigging, and UI elements.
- Origin Two (2D Game Engine)   *(2023, Java)*
  - Custom built 2D game engine supporting industry properties, such as collision detection, physics, pathfinding, artificial intelligence, extensive UI library, sprite animations, level loading, sound effects.
  - Supports custom dungeon crawler and platformer games.
- Realtime Graphics & Ray Tracing   *(2022, C++)*
  - Real-time scene viewer using OpenGL and the real-time graphics pipeline. Allows for real-time shape manipulation, camera movement, and post-processing features. Features custom GLSL shaders and framebuffers.
  - 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.

WORK EXPERIENCE:

- **Head Teaching Assistant,**   *(October 2023 - May 2024)*
  Brown CSCI 1300 – User Interface and User Experiences (UI/UX)
  - Develops course materials alongside instructors for revised curriculum
  - Responsible for the hiring, organization, and mentorship of undergraduate teaching assistants
  - Manages course, student, and undergraduate teaching assistant logistics
- **Software Engineer Intern,**   *(May 2023 - Aug 2023)*
  Onset Computer Company – Bourne, MA
  - Focus on frontend development of pilot database and device management application for product consumers
  - Made direct contributions to product frontend and middleware, completing multiple user stories within an Agile development environment
  - Collaborated with other software developers and product managers in making iterative design decisions
- **Undergraduate Teaching Assistant,**   *(Aug 2022 - Dec 2022)*
  Brown CSCI 0150 – Intro to Object Oriented Programming
  - Assisted students in project design, development, and debugging, as well as general learning objectives to encourage success and passion toward the course
- **Data Assistant,**   *(June 2022 - Aug 2022)*
  Survey Research Center at Brown University School of Public Health
  - Designed and implemented custom Javascript-powered user interface within the Qualtrics survey engine to optimize participant experience for large-scale research endeavors