RYAN NGUYEN

My name is Ryan Nguyen, and I am an international student with a passion for all things related to digital arts and computer science. I have in-depth experience in Web Design, UI/UX Design, Full-Stack Design, Game Design, and Graphical Programing. Additionally, I have over two years of professional experience in the graphic design industry.

Project

PORTFOLIO WEBSITE WITH THREE.JS INTERGRATION

- Created an interactive, responsive, and realistic 3D Earth using React Three Fiber, and custom WebGL shaders.
- Created an intuitive, modular and smooth User Interface with Shadcn/ui, React, GSAP, Tailwind, and Redux.

TURN-BASED ROLE-PLAYING GAME COMBAT SYSTEM IN 3D UNITY

- Created an extendable, generalized, and modularized turn-based combat system for a limitless number of entities.
- Applied realistic lighting, volumetric fogs, and wind simulation to enhance immersion for the playable scene.

DISEASE AND CONTROL SIMULATION ON A FIXED POPULATION

- Created a 2D Simulation of a dynamically behaved population undergoing a pandemic with a heavy use of inheritance and polymorphism with C++.
- Added real-time visualization with QT Creator graphical libraries.

VISUALIZATION OF DIJKSTRA'S ALGORITHM ON CUSTOMIZABLE MAPS WITH GUI AND STORAGE IMPLEMENTATION

- Designed and coded a real-time visualization of Dijkstra's path-finding algorithm on a user-made nodes map.
- Created an intuitive and reactive GUI with C++ QT Creator GUI libraries.
- Implemented a save/load system to store user's custom-made map.

REVERSE POLISH CALCULATOR WITH ANTLR INTEGRATION

- Applied ANTLR (Another Tool for Language Recognition) as a parser. Use context-free grammar to break down infix expression into postfix expression. Use Gradle as a Java build tool.

Experience

MOTION GRAPHIC DESIGNER/ GRAPHIC DESIGNER

Edmonds College, WA 2021 – 2023

- Designed and led advertisement campaigns of student, faculty, and local events in the community using Adobe Illustrator, Photoshop, and After Effect.

NEWSLETTER EDITOR ON GRAPHIC DESIGNER/ GRAPHIC DESIGNER

Bellevue College, WA   2023 – 2024

- Designed and edited newsletters for the Computer Science Department, and Computer Science Student Advisory Board

Education

AA in Computer Science
Edmonds College
WA | 2020 – 2023

BS in Computer Science
Bellevue College
WA | 2023 - 2025

Skills

Algorithms & Data Structures, Software Engineering, Test-driven Development, Full-stack Programming, Database, Machine Learning, Networking.

Graphic Programming, UI/UX Design.

Graphic Design, Motion Graphic Design.

Languages

C, C++, C#, Java, Python, ANTLR, SQL, HTML, CSS, JavaScript.

Framework

Web Development: React, Three.js, WebGL, React Three Fiber, Tailwind CSS, Shadcn/ui, Redux, Qt6, GSA.

Build Tools: Gradle, Maven, Vite, Cmake, Unity

Design Tools: Adobe Photoshop, Lightroom, Illustrator, After Effect, Premiere.