

# Joyce L. Qin

## Software Engineer

- +1 (214) 836-6391
- joyce.l.qin@gmail.com
- LinkedIn.com/in/JoyceLQin
- github.com/jlq279
- joycelqin.journoportfollio.com

## Summary

Honors computer science with a fine arts background.

Creative, effective, fast learner. Seeking a new-grad position for 2024.

## Education

- 2023 **University of Texas at Austin**  
B.S.A, Computer Science,  
Certificate in Digital Arts & Media
  - With an emphasis in game developmentTuring Scholars honors program

## Interests

- Animation
- Computer Graphics
- Graphic Design
- UI/UX
- Video Game Development

## Skills

### Programming Languages

Java • C/C++/C# • Python • MATLAB • GLSL • GDScript • JavaScript • TypeScript • Scala • Ruby • Kotlin

### Web and App Development

HTML • CSS • Bootstrap • React.js • React Native • Node.js • Vue.js • jQuery

### Databases

SQLite • MongoDB • IndexedDB

### Technology

Git • Blender • Godot •  $\LaTeX$

### Arts and Design

Drawing • Painting • Graphic Design • Digital Art • Photography • Procreate

## Work Experience

- May 2023 - July 2023 **Expedia Group** Seattle, WA  
*UX Engineering Intern*
  - Designed and developed fully accessible pages for a11y screen reader training used by 1000s of employees using **TypeScript React.js**
  - Debugged accessibility issues in core UI components shared across all Expedia Group brands
- May 2022 - August 2022 **The BHW Group** Austin, TX  
*Software Engineering Intern*
  - Created fully responsive website UI in **TypeScript React.js**
  - Developed native counterpart in iOS and Android environments using **TypeScript React Native**
  - Enabled mock API to wire up app and website flow with realistic requests and responses
  - Participated in code reviews and maintained high-quality standards throughout codebase
- June 2021 - August 2021 **Kalkomey Enterprises, LLC** Remote  
*Software Engineering Intern*
  - Processed 1000s of lines of data to generate recommendations
  - Wrote **SQL** queries to write data into **SQLite** database
  - Created a recommendation generator in **Ruby on Rails** styled with **Bootstrap**
- June 2020 - August 2020 **Lockheed Martin** Remote  
*Software Engineering Intern*
  - Implemented front end features using **SAPUI5** to help expedite batch processing of F-35 part order data
  - Built message logviewer tool to track well over 100,000 part order data logs daily
  - Made **jQuery AJAX** calls to the **SAP HANA** database
  - Supported software development teams, assisting with test environment and framework creation

## Projects

- 2023 **Minecraft**
  - Procedurally generated terrain and textures in an infinite, seamless, open world in a **TypeScript** and **OpenGL** application
  - Implemented time-varying textures, mining, and block placement
- 2023 **Ray Tracer and Path Tracer**
  - Implemented a Whitted-style ray tracer and a path tracer in **C++**
  - Constructed a BVH tree for up to 16x faster performance
- 2022 **Basic Multicore Multithreaded Operating System**
  - Developed an operating system in C++ with the following features:
    - Preemptive multitasking
    - Ext2 file system
    - Virtual memory
    - Syscalls
- 2022 **AArch64 Emulator**
  - Wrote an emulator for a subset of the AArch64 Instruction Set Architecture using **C**
- 2022 **Custom Wordle**
  - Built an **Android Kotlin** Wordle app with customizable dictionaries, word lengths, and number of guesses
- 2021 **Web Crawler and Search Engine**
  - Developed a **Java** application that crawls a contained portion of web (over 50,000 pages) and builds a searchable index
  - Built a search engine that supports basic queries, negative queries, and phrase queries on the index