

# Kurt Choi

Software Engineer / Web Developer

✉ [choi.kurt3@gmail.com](mailto:choi.kurt3@gmail.com) 🌐 [kurtchoi.dev](https://kurtchoi.dev) 🐙 [GitHub](#) [in](#) [LinkedIn](#)

## EDUCATION

**University of Waterloo** | Bachelor's Degree in Computer Science      Graduation in June, 2021 (Expected)  
Relevant Courseworks

- Object-Oriented Software Development / Logic and Computation / Data Structures and Data Management / Computer Organization and Design / Computer Networks / Algorithms / Operating Systems / Numerical Computation / User Interfaces / Introduction to Database Management / Introduction to Artificial Intelligence / Foundations to Sequential Programs / Applied Cryptography

## PROJECTS

**kDrive** | React/Bootstrap-based Cloud Storage Application      Feb, 2021

- React-Bootstrap/JavaScript has been used as basic framework
- Google's Firebase platform has been used for user authentication and data storage
- React's Hooks API has been used throughout various parts of the application and Context API has been used exclusively for handling authentication
- Fully functioning authentication, file upload and directory tree

**kurtchoi.dev** | Personal portfolio website      Feb, 2021

- Combination of React/JavaScript/SCSS has been used
- Various React libraries were used appropriately to enhance user experience
- Framer Motion library used to create various transition animations and effects

**The Royal Game of Ur AI** | Artificial Intelligence agent for a board game      Dec, 2020

- A collaborative project to create an Artificial Intelligence agent for the oldest known board game in history, The Royal Game of Ur
- Used Genetic Algorithm approach with standard cross-over and mutation function
- 10 separate gene values were given to each agent that each represent the agent's priority on certain aspects of the game that are combined to determine their next move
- Crossover and mutation functions are applied to these agents to evolve over generations
- Final resulting agent showed over 95% winrate against agents with random heuristics

## SKILLS

### Programming

- Languages: Python, C, C++, JavaScript (ES6), TypeScript, CSS3, HTML5, Scheme
- Frameworks and Libraries: React, Redux, Bootstrap, jQuery, SQL, REST APIs

### Tools/Misc

- Tools: Git, Linux, Bash, Sass, RegEx,  $\text{\LaTeX}$
- Misc: Photoshop, Word, Excel

## CERTIFICATIONS

**Responsive Web Design Certification** | [freeCodeCamp.org](https://freeCodeCamp.org)      Jan, 2021  
Basic HTML and HTML5 / Basic CSS / Applied Visual Design / Responsive Web Design Principles

**JavaScript Algorithms and Data Structures Certification** | [freeCodeCamp.org](https://freeCodeCamp.org)      Feb, 2021  
ES6 / RegEx / JavaScript Data Structures / Object-Oriented Programming / Functional Programming

**Front End Libraries Certification** | [freeCodeCamp.org](https://freeCodeCamp.org)      Feb, 2021  
Bootstrap / jQuery / SASS / React / Redux