

Kurt Choi

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<https://kurtchoi.dev>

EDUCATION

University of Waterloo

BCS in Computer Science (Degree requirements completed)

Waterloo, Ontario

~ June, 2021 (Conferral Date)

- **Programming Courseworks:** Algorithms, Data Structures and Data Management, Object-oriented Programming, User Interfaces, Intro to Artificial Intelligence, Operating Systems, Computer Organization and Design, Foundations of Sequential Programs, Computer Networks, Logic and Computation, Intro to Database Management

PROJECTS

ARAM.GG | *React, Django, PostgreSQL, SCSS, Docker, REST API, Chakra UI*

Feb 2021 - *Present*

- Developed a full-stack web application that analyzes and visualizes users' gameplay performance
- Users' gameplay data are fetched using Riot Games Developer API and stored in PostgreSQL database by using Django framework
- API endpoints that handle various queries are created and utilized to generate meaningful analyses and are handled in React based front-end of the application to be presented to the users
- Utilized Docker environment for development shareability
- The project is currently under development, and is available at github.com/Hintful/aram.gg

Conway's Game of Life Ultra | *React, TypeScript, CSS*

Feb 2021

- Developed a React-based simulation for Conway's Game of Life
- Implemented various features such as iteration speed control, grid wrap-around, and template loading functionality that enhances user-experience
- Designed a unique scoring-system that evaluates the score by counting the number of new cells reproduced in a limited number of iterations
- Project is deployed online at kurtchoi.dev/game-of-life

Babble | *React, JavaScript, Firebase, CSS, Chakra UI*

Feb 2021

- An interactive chat-application built with React and Google's Firebase platform
- Implemented an interactive feature where users of the application are awarded with points upon sending messages and allows them to earn new profile badges depending on the amount of points acquired
- User authentication is implemented with Firebase authentication, and user information are stored in Cloud Firestore
- Project is deployed online at kurtchoi.dev/Babble

kDrive | *React, Firebase, Bootstrap, CSS*

Feb 2021

- A React based Web Cloud Storage application
- User Authentication and data storage is implemented with Firebase Authentication and Cloud Firestore, both provided by Google Firebase
- Project is deployed online at kurtchoi.dev/kDrive

The Royal Game of Ur AI | *Python, Artificial Intelligence*

Sept 2020 - Dec 2020

- A collaborative project with 2 other peers - developed an Artificial Intelligence agent that can play the oldest known board game in history, The Royal Game of Ur
- Utilized a standard genetic algorithm approach with cross-over and mutation function to improve quality of AI over multiple generations
- Final AI agent achieved over 95% win-rate against a baseline testing agent using random heuristics
- The project is open-source, and is available at github.com/Hintful/game-of-ur-genetic-algorithm

TECHNICAL SKILLS

Proficient: Python, React, CSS3, HTML5, JavaScript, C++

Experienced: C, TypeScript, Java, Git, ES6, REST API

Familiar: Node.js, Express, PostgreSQL, MongoDB, Django, jQuery, Redux, Flask