

# Kenneth Daiki Nakashimo

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Visit: <https://u1130131.github.io>

## Language

English, Japanese

## Education

**University of Utah**, Salt Lake City, Utah Fall 2017 – Spring 2023

Major: Computer Science B.S.

Interests: Backend Development, CG, Networking

Strengths: Database, Web Application

Notable CS Courses Taken:

3190	Foundation of Data Analysis	4440	Introduction to Computer Security
3810	Computer Organization	4480	Computer Networks
4150	Algorithms	4600	Computer Graphics**
4300	Artificial Intelligence	5530	Database Systems
4400	Computer Systems**		

\*.. in-progress

## Skills

Operating Systems: Windows, Linux

Programming Languages: C, C++, C#, Java, JavaScript, Python

Tools: .Net, AWS, Azure, Blazor, Docker, Git, GitHub, MariaDB, MySQL, SSMS

Syntax/Libraries: CSS, HTML, FFmpeg, LINQ, SQL, GLSL, WebGL

## Projects

**Senior Capstone Project** – Coursework | Team

Jan 2022 – Dec 2022

Social media style, all-in-one fitness web + mobile application designed to plan and customize workout routines and meals.

- Role: 1) Controllers (MVC) and data. Create and manage database and operations for project.
- 2) Manage team's project page.

**Computation Research** – Self-Study | Individual

Nov 2021 – Dec 2021

Topic: Software Correctness using Deterministic Finite Automata (DFA) and Boolean Satisfiability problem (SAT)

Goal: Use Cryptominisat to determine if a DFA can be constructed in  $n$  nodes.

**Learning Management System (LMS)** – Coursework | Pair

Feb 2021 – Apr 2021

Database semester project implementing a tool for tracking educational entities, such as users, courses, etc.

- Drawing an Entity-Relationship (ER) diagram and translating to MySQL for storing and querying data.
- Implement controllers for a course management application using a database and LINQ in C#.

**Web-Scrape Timeline FFmpeg** – Coursework | Team

Oct 2020 – Dec 2020

Collecting real-time data from 6 web sources every hour and compiling a visual timeline.

- Utilizing AWS to automate hourly execution of Docker and Python codes to extract data (web scraping) and store in Git.
- Using Docker to also run C++ code to format selected data into frames and compile the MP4 video with FFmpeg libraries.
- Tools: AWS, C++, Python, FFmpeg, Selenium(?)

**'Agar.io' Game** – Coursework | Individual

Mar 2020 – Apr 2020

Client-side game based off of the Agar.io web game and displaying game statistics.

- Multithreading to read/send JSON objects and player movement.
- Using SQL Server Management Studio (SSMS, Microsoft) and HTTP to construct basic web pages to display game data.

**Spreadsheet** – Coursework | Pair

Jan 2020 – Feb 2020

Program supporting basic calculator and variable functions in the known grid format.

- First exposure and practicing of software development with task managing (GitHub Projects).