DANIEL KIM

(647) 473-2077
dy2kim@uwaterloo.ca
Mississauga, Ontario
www.linkedin.com/in/daniel-kim-67aa532bb

OBJECTIVE

Motivated first-year Mathematics and Computer Science student seeking opportunities to apply mathematical and programming skills in real-world settings, contribute to projects, and gain hands-on experience in the field.

SKILLS

- C, Racket, Python, C#
- Knowledge of Version Control (git)
- Visual Studio Code
- Linux Terminal (bash)
- Adobe Suite
- Microsoft Suite
- Understanding of software development skills such as algorithm designs, data structures, and etc.
- Excellent communication skills, both verbally and written, developed through 4+ years of volunteer work
- Solid teamwork and problem-solving from working alongside peers on numerous projects
- Eagerness to learn new skills

AWARDS

- Term Distinction (1A Term)
  - Awarded for students who achieve an +80% term average
- President's Scholarship of Distinction
  - +95% entry average

INTERESTS

- **Music** - Played for Youth Orchestra, High School Band, and Church Worship Team for 3+ years
- **Sports** - Member of High School Volleyball and Table Tennis Team (Earned 1st in Senior Boys Doubles)
- **Media Production**

EDUCATION

University of Waterloo

(Honours) Bachelor of Mathematics
2023 – Present

References Available upon Request

PROJECTS

Dou Dizhu Card Game

- Developed a text-based implementation of the Dou Dizhu card game in Racket
- Utilized functional programming principles in Racket to model game components such as cards, players, and game states, ensuring modularity and code reusability
- Integrated error-checking mechanisms to validate player inputs and enforce game rules, ensuring fair and accurate game play

Airline Boarding ADT Implementation

- Developed an implementation of the Queue Abstract Data Type (ADT) in C as a model for Airline Boarding
- Utilized dynamic memory allocation techniques such as malloc() and free() to manage memory usage and prevent memory leaks in the implementation
- Incorporated real-world airline boarding principles and practices into the model, including boarding priorities, seat assignments, and passenger behaviors

Where's Waldo

- Developed a Where's Waldo-inspired game using the Unity game engine as a personal project
- Designed and implemented game mechanics, including scene navigation, player controls, character placement, and scoring system, using Unity's components and scripting in C#

RELEVANT EXPERIENCE

Math Tutor

John Fraser Secondary School | Sep 2022 - June 2023

- Provided tutoring support to high school students in mathematics subjects
- Assisted students with homework assignments and exam preparation
- Adapted teaching methods to suit individual learning styles and needs

Church Leader

Westside Presbyterian Church | August 2021 - July 2023

- Organized and participated in group activities, including community service projects, retreats, and social events, to foster camaraderie and teamwork among members
- Demonstrated empathy, patience, and understanding in interactions with youth members, creating a safe and inclusive environment where all feel valued and accepted
- Facilitated weekly youth group meetings, leading discussions on topics such as faith, values, and personal development