

### Skills

|     |                            |                 |            |                     |                    |
|-----|----------------------------|-----------------|------------|---------------------|--------------------|
| C   | C#                         | Unity Engine    | DirectX 11 | Game / Level Design | UI/UX              |
| C++ | Artificial Intelligent(AI) | Unreal Engine 4 | gcc/g++    | Source Control      | Project Scheduling |

### Academic Projects

**AI programmer - Kaiju Kabouly (2 programmers, 2 designers)** 2022 - Present

*3D VR first-person action simulation game / Unity Engine*

- Wrote the code for the car AI system which enables traffic system in the game
- Developed human AI to reduce errors and show better movement

**Pathfinding Algorithm Visualizer (Solo project)** 2021

*3D pathfinding algorithm visualizer program / Unity Engine*

- Completed core architecture which enables switch into different pathfinding algorithm easily
- Visualized Dijkstra algorithm, Astar algorithm and Breadth First Search algorithm
- Implemented custom and procedurally generated obstacle system to show pathfinding in the complex environment

**AI programmer - Flow Field Project (2 programmers)** 2020

*Flow field game AI project / Custom Engine*

- Formulated core features including AI by using the Dijkstra algorithm in C++ language
- Handled project management and designed program concept and core program mechanics

**Producer, Gameplay programmer - Cheese Roll (4 programmers)** 2019 - 2020

*2D top-down cooperating puzzle game / Custom Engine*

- Built core game mechanics and game levels with C++ language include balancing game levels
- Managed the team efficiently and successfully for well-organized teamwork
- Programmed main menu UI, tutorials and credit scenes

**Technical Director, Gameplay programmer - Finding Coffin (3 programmers)** 2016

*2D platformer running game / Custom Engine*

- Constructed core game concept and core mechanism
- Made gameplay, physics code with C language
- Designed overall UI of the game include score, main menu and credit scene

### Work Experience

**Teaching Assistant - DigiPen Institute of Technology** September 2021 - Present

- Helped students with C# programming in two classes to further their understanding of core topics
- Graded students' project and lab submissions and provide constructive and detailed feedback

February 2021 - April 2021

- Assisted professor in CS Programming class by helping students to understand C++ and its object-oriented features
- Reviewed student works giving productive comment after grading submissions

**Highschool Programming Lecturer - DigiPen Institute of Technology** November 2021 - March 2022

- Taught 12th grade students in Collège Notre-Dame de Jamhour, the catholic school located in Baabda, Lebanon
- Coached C language skills by lecture, quiz and assignments
- Led Tank game project so that students can understand how to use c language and how game programming works

**Programming Camp Guardian - DigiPen Institute of Technology** July 2019 - August 2019

- Supported K12 students in terms of all education courses they got during programming camp include Unity game programming, art and sound design
- Managed student life throughout camp period such as accommodation, city tour, transportation, etc.
- Resolved conflicts between students and camp organizer and communicate with parents to reduce their worries

### Education

**DigiPen Institute of Technology** 2015 - Expect Graduation: April 2022

Bachelor of Science in Computer Science and Game Design

### Additional Information

**Military Service: Sergeant, Republic of Korea Army Reconnaissance and Surveillance Unit** 2016 - 2018

- Received an award certificate medal from United Nations Command MAC secretary and awarded certificate from regimental commander for marvelous mission performance at the border against North Korea