# Keitaro Nishijima

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#### SKILLS

- Programming Languages: C/C++, Java, Python, LaTeX, Mathematica, Matlab, JavaScript, TypeScript, HTML/CSS
- Productivity Tools: Microsoft Office, Visual Studio Code, IntelliJ
- Languages: English (Fluent), Japanese (Native), Spanish (Conversational)

#### **EDUCATION**

## Brown University, GPA 3.86/4.0

Providence, RI | Class of 2024

- Sc.B in Computer Science.
- Relevant Coursework: Object-Oriented Programming, Data Structures and Algorithms, Discrete Mathematics, Computer Systems Engineering, Honors Mechanical Engineering, Software Engineering, Machine Learning, Deep Learning, Computer Vision

## Lester.B.Pearson College of the Pacific

Victoria, Canada | Class of 2020

- Received International Baccalaureate degree with bilingual diploma in English and Japanese
- Led the sailing team and organized a week expedition sailing trip to Vancouver with six other students

## Kaisei Academy

Japan | Class of 2020

• Competed in multiple debate competitions both nationally and internationally

## **PROJECTS**

Study Buddy Finder (Java, TypeScript, React, Firebase, MongoDB)

- Designed and implemented a web application that allows students at Brown to register/login and update their profiles to find other students to study with.
- Built an interactive frontend program that can communicate with the backend program to retrieve information about other students based on users' profiles.

Machine Translation (Python, TensorFlow)

- Implemented a machine translation model using recurrent neural networks.
- Trained the implemented model using Hansards of the Canadian Parliament to translate French sentences to English sentences.

15 Category Image Classification (Python, TensorFlow)

- Designed and implemented my own convolutional neural network to classify 15 different categorical scenes
- Train the model using 1500 images and achieved 85% accuracy in the test dataset

## Seam Carving (Java)

• Used a dynamic programming approach to discover and delete the least significant pixels from a route or a "seam", resulting in a smaller image without distorting critical aspects of the original image

# Maze & Maze Solver (C)

• Implemented a program that randomly generates a maze represented by binary codes and a program that solves the maze, finding a solution path from the start to the goal using the drunken-walk algorithm