

## COURSE WORK

## TERTIARY

Logic & Mathematics  
Data Analytics  
Computational Thinking  
User Experience & Interface Design  
Network Technology  
IT Systems & Essentials  
Database Application Development  
Website Development  
Data Structures & Algorithms  
Game Modelling  
Game Design  
Game Development  
Game Math & Physics  
Game AI  
Programming w/ Game Engines  
Mixed Reality Application Development

## PROJECTS

## Game AI Final Project

Implemented AI using Finite State Machines and Behaviour Trees, and an A\* pathfinding algorithm using C#, Panda BT and Unity

## Water &amp; Buoyancy Implementation

A self-directed learning project where I implemented the physical characteristics of water into Unity using C#

## Pac-Man Machine Learning Project

An independent learning project focused on reinforced machine learning and AI implementation in Pac-Man under the Guided Learning Curriculum

## AWARDS

## 2022 Edusave Certificate of Academic Achievement

Top 25% for good academic performance and conduct

## 2021 Director's List

Top 10% for excellent performance in the academic year 2020/2021

## 2020 Director's List

Top 10% for excellent performance in the academic year 2019/2020

## 2018 Edusave Award for Achievement, Good Leadership and Service

Top 15% for excellence in conduct, leadership, service and co-curricular activities

## SKILLS

## PROGRAMMING LANGUAGES

C# • Java • Python • Rust • HTML • CSS • JavaScript • MySQL • LaTeX • Lua • Powershell

## TOOLS

Microsoft Word • Excel • PowerPoint • Microsoft Visual Studio • Adobe Photoshop • Illustrator • Premiere Pro • XD • Google Docs • Sheets • Slides • Unity • Maya • Git

## DEVELOPMENT

Full-Stack Web • Mobile • Desktop

## EDUCATION

## TEMASEK POLYTECHNIC (TP) | School of Informatics &amp; IT

Apr 2019 - Apr 2022

- Diploma with Merit in Game Design & Development (GDD)
  - Awarded to the Top 10% of the graduating cohort
- Cumulative Grade Point Average: 3.69/4.00

## ST. PATRICK'S SECONDARY SCHOOL (SPS)

Jan 2014 - Dec 2018

- Singapore Cambridge GCSE O Level Certificate

## WORK EXPERIENCE

## SINGAPORE POLICE FORCE | Airport Police Division

Aug 2022 - Aug 2024

## Patrol Officer

- To protect Singapore Civil Aviation against crime.

## SUPREME COURT | Singapore Judicial College

Jul 2021 - Feb 2022

## Project Executive Intern

- Designed and developed educational games to enhance learning of the school's modules, using C# and Unity
- Designed and developed an educational video to express the school's pedagogical concepts, using Adobe Premiere Pro, Illustrator & Photoshop.

## CO-CURRICULAR ACTIVITIES

## TP | GDD | Student Interest Group

Apr 2019 - Apr 2022

## President - Vice-President - Honorary Secretary

- Led a student-run club focused on organizing events to enrich GDD student life and support academic learning.
- Oversaw initiatives such as academic-support workshops and talent showcases, including a T-Shirt design competition.

## SPS | National Cadet Corps (NCC) (AIR)

Jan 2015 - Dec 2018

## 1st Sergeant - 3rd Sergeant - Corporal - Lance Corporal

- Represented school in the 2017 National Day and International St. Patrick's Day Parade
- Represented school in the 2016 & 2017 NCC Annual Freestyle Drill competition
- Represented school in the 2016 HQ Annual Best Unit Competition and obtained the Silver Award

## SPS | Prefectorial Board

Jan 2015 - Dec 2018

## Senior Prefect

- Served as a student leader and role model within the school community
- Provided support and guidance at key school events, such as Open House
- Facilitated camps including the Secondary 1 Orientation and Patrician Leadership Training Camp (PLTC)

## VOLUNTEER EXPERIENCE

## JAPANESE EXCHANGE PROGRAMME

120hrs - 2019

## Organiser

- Hosted Japanese exchange students from KNIT.HI during their visit to Singapore
- Accompanied and oriented students through key cultural, educational, and heritage sites in Singapore

## COMMUNITY LABORATORY PROJECT

24hrs - 2018

## Committee Member

- Co-led in a student initiated project, with the purpose to improve the well-being of the elderly at an old folks home
- Produced and published a book compiling the residents' stories and recipes to provide a means to foster connection with their families