

MICHAEL KWOK

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EDUCATION

BSc. Computer Engineering, 2nd Year

University of Alberta

 September 2017 – May 2022  Edmonton, AB, Canada

PROJECTS

KaiChiNDS

 Ongoing Project  [n30phyte/KaiChiNDS](#)

- > Emulator for Nintendo DS and Gameboy Advance consoles, with an emphasis on experimentation and learning.
- > An ongoing research project made in collaboration with Cynthia Li.
- > Used as a scratchpad to learn how to write optimized, clean code in C++, utilization of STL to increase code reuse, application of Computer Architecture courses and graphics programming.
- > **Technologies:** C++, SFML, OpenGL, CMake,

Klutter

 Ongoing Project  [n30phyte/Klutter](#)

- > Inspired by SuperCook, an app to help planning meals over the week easier.
- > Written in Dart as a project to introduce myself to mobile app development.
- > **Technologies:** Flutter, Dart

github.io Webpage

 Ongoing Project  [n30phyte.github.io](#)


- > A playground for learning web technologies for single page applications.
- > **Technologies:** Vue, HTML, CSS, JavaScript

AI Pong

 28 November 2018  [n30phyte/HackEDBeta2018](#)

- > First large scale team project in C++, using SFML to write a Pong clone to be controlled by a Python AI agent.
- > Written during HackED Beta 2018, a hackathon hosted by the University of Alberta Computer Engineering Club.
- > **Technologies:** C++, SFML, Python, Keras, TensorFlow

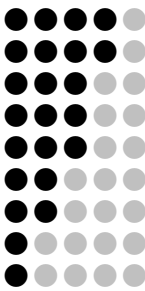
SpotifyThing

 2 January 2018  [n30phyte/SpotifyThing](#)

- > Created a small script to automate the monotonous and repetitive task of turning Spotify playlists to CSV files.
- > **Technologies:** C#, Spotify Web API

PROGRAMMING LANGUAGES

C++
Python
C#
LaTeX
Shell Scripting
JavaScript
TypeScript
Matlab
VHDL



TECHNOLOGIES & PROGRAMS

CMake Google Test Git Vue vcpkg
SFML Flutter IntelliJ IDEs Wireshark
Visual Studio Visual Studio Code Windows
Linux

VOLUNTEERING

VP Finance

Indonesian Students' Association Edmonton
PERMIKA Edmonton

 January 2019 – Present

- > Helped restart the chapter after 2 years of inactivity due to lack of manpower.
- > Manage finances and budgeting for events and fundraisers.
- > Successfully budgeted a fundraiser that had a 50% return on investment.

Software Team Member

Autonomous Robotic Vehicle Project

 May 2018 – Present

- > Increased productivity by writing scripts that help automate various repetitive tasks, interfacing with Google App APIs, GitHub's API and simulation scripts for ROS in C++ and Python.
- > Improved test coverage for robot's control systems by writing Google Test unit tests.
- > Currently spearheading a rewrite for the robot's aging simulator to allow for more automated testing, improving simulator stability and reduce reliance on an external unmaintained codebase.
- > Updated old and undocumented code to fix issues and add features.