# MICHAEL KWOK

✉ mkwok1@ualberta.ca    ⌨ n30phyte    in Michael Kwok    ⚲ Edmonton, AB    ☎ +1 587 937 5980

## 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

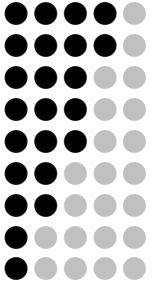### SpotifyThing

📅 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

## MISCELLANEOUS

› Highly motivated self-learner.
  › Started learning Computer Programming at the age of 10 through books.
  › Gained experience with Linux Server hosting from trial and error on old computer.
› Experience with building multiple PCs and replacing components in broken laptops.
› Experience with using Oscilloscopes and Digital Multimeters to test electronics.

## 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.

## INTERESTS

› Very interested in lower level programming.
› Enjoys playing Badminton and doing Martial Arts