TYLER CHAN

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EDUCATION Rensselaer Polytechnic Institute, Troy, NY

Bachelor of Science in Computer Systems Engineering & Computer Science

Summer & Spring 2022

Spring 2022

Spring 2022

2022-Present

Summer 2022

2021-Present

Expected Graduation: December 2023

G.P.A. 3.7/4.0

RELEVANT SUBJECTS Rensselaer Center for Open Source (RCOS)

RCOS is a course and community of students who develop

and contribute to open source projects.

Intro to Algorithms

Topics covered: Algorithm Analysis, Graph Algorithms, Greedy Algorithms, Dynamic Programming, and NP-Completeness. Utilized Dynamic Programming in an

autocomplete feature in a personal project (Sekaidle Bot).

Electric Circuits

Topics covered: first and second order circuit analysis and design, operational amplifiers, AC steady state analysis, s-plane representation, and Laplace Transform.

For a design based lab, designed and assembled prototype

haptics glove.

SKILLS

Programming Skills Python, C, C++, Java, Lua, LaTeX

Language Skills Cantonese, Mandarin, Japanese

Software Skills Git, CAD, Office Studio

EXPERIENCE & PROJECTS

Overlord Bot (RCOS)

Overlord is an open source Discord bot designed by RPI

students for RCOS.

Currently working on various subprojects for the bot:

- An improved polling system with a better UI.
- A minigame similar to GraphWars.

OpenCircuits (RCOS)

OpenCircuits is an open source circuit design software designed and maintained by RPI students for RCOS. Improved the busing feature by programming the ability

to select components instead individual ports to bus.

Sekaidle Bot 2022-Present

Recreated the country guessing game, <u>Worldle</u>, that can be played in discord. To make up for the lack of an autocorrect feature, implemented a dynamic programming algorithm to find the most similar country names and suggest them

to the user.

Ferris Bot 2021-Present

Created a Discord bot with a polling system that updates live when users vote.

Microcontroller Projects

Recreated the classic game of pong on an Arduino Nano with buttons and a tiny 128x32 OLED display on a

breadboard: scratch-pong.