TYLER CHAN

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EDUCATION	Rensselaer Polytechnic Institute, Troy, NY Bachelor of Science in Computer Systems Engineering & Computer Science Expected Graduation: December 2023 G.P.A. 3.7/4.0

RELEVANT SUBJECTS

Intro To Engineering Design — Spring 2022
Topics covered: customer needs, design objectives, design specifications, documentation, project management, and verbal and written communication.
The course also included a semester long design project (see Automatic Pill Dispenser below).

Electric Circuits — Spring 2022
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.

Embedded Control — Fall 2021
Topics covered: dynamic systems, ADC, driver circuits, parallel I/O, modular programming, and subsystem integration. Utilized a MSP432 microcontroller with a TI Robotic Car for lab. In addition, utilized I2C to interface with external sensors.

SKILLS

Programming Skills	Python, C, C++, Java, Lua, LaTeX
Language Skills	Cantonese, Mandarin, Japanese
Software Skills	Git, CAD, Office Studio

EXPERIENCE & PROJECTS

OpenCircuits (RCOS) — 2022
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, Worldle, 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.

Automatic Pill Dispenser — 2022
Programmed an Arduino microcontroller in a semester long design project for IED, the Automatic Pill Dispenser to control the dispensing of pills and interfacing with a touch-screen display.

Ferris Bot — 2021-Present
Created a Discord bot with a polling system that updates live when users vote.

Scratch Pong — 2021
Recreated the classic game of pong on an Arduino Nano with buttons and a tiny 128x32 OLED display on a breadboard.