

TYLER CHAN

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<https://github.com/DeBestTrap>

EDUCATION	Rensselaer Polytechnic Institute, Troy, NY Bachelor of Science in Computer and Systems Engineering & Computer Science - Expected Graduation: December 2023 Masters of Science in Computer Science - Expected Graduation: December 2024 G.P.A. 3.74/4.00	
RELEVANT SUBJECTS	Computational Creativity	Fall 2023
	- How do machines learn to be creative? - Topics covered: VAEs, GANs, diffusion models, normalizing flow models, language models, Stable Diffusion, DALLÉ-2, and music generation.	
	Intro to Machine Learning	Fall 2022
	- Topics covered: generative/discriminative learning, parametric/non-parametric learning, neural networks, support vector machines, clustering, dimensionality reduction, and kernel methods.	
EXPERIENCE	Engineering Co-Op Western Digital, Rochester MN - Created custom Clang-tidy and Clang-format tools. - Created data collection tools for machine learning models. - Utilized various supervised and unsupervised learning techniques to learn trends in gathered data.	Jan-Aug 2023
SKILLS	Programming Skills Python, C, C++, Java, Lua, LaTeX Language Skills Cantonese, Mandarin, Japanese Software Skills Git, CAD, Office Studio	
PROJECTS	<u>Alpaca-LoRA WebUI</u>	2023
	- Created a webui with Gradio to more easily use, train and evaluate/benchmark LoRAs for large language models like GPT-2, LLaMA, GPT-J, etc.	
	<u>OpenCircuits (RCOS)</u>	2022
	- OpenCircuits is an open source circuit design software designed and maintained by RPI students for RCOS. - Improved the bussing feature by adding the ability to select whole components instead individual ports to bus.	
	<u>Sekaidle</u>	2022-Present
	- Recreated the country guessing game, <u>Worldle</u> , that can be played in Discord. - Implemented a dynamic programming algorithm to make up for the lack of an autocorrect and find the most similar country names to suggest them to the user.	
	<u>Automatic Pill Dispenser</u>	2022
	- Programmed an Arduino microcontroller in a semester long design project, the <u>Automatic Pill Dispenser</u> . - The Arduino would control the dispensing of pills and interfacing with a touch-screen display.	