TYLER CHAN

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EDUCATION

Rensselaer Polytechnic Institute, Troy, NY
- BS in Computer and Systems Engineering & Computer Science
  Expected Graduation: December 2023
- MS in Computer Science
  Expected Graduation: December 2024

GPA: 3.77/4.00

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,
  DALLE-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   Jan-Aug 2023
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.

SKILLS

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

PROJECTS

Text2Movie   2023
- Created a pipeline to transform a simple description into a
  multi-scene movie complete with voice acting and videos, all
  generated with SOTA tools.
- Semester long project for Computational Creativity.

Alpaca-LoRA WebUI   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.

OpenCircuits (RCOS)   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.

Sekaidle   2022
- Recreated the country guessing game, Worldle, 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.