

Anthony Tan

(204) 290-3888 • Montreal/Winnipeg • anthonytan8@protonmail.com • <https://mrmondrian.github.io/portfolio>

EDUCATION

McGill University

Sept. 2021 – May 2024 (anticipated)

Honours Bachelor of Science, Computer Science

- 3.94/4.0 GPA
- Relevant graduate courses: Applied Machine Learning, Computer Networks, Computer Networks
- Relevant undergraduate courses: Robotics and Intelligent Systems, Computer Graphics, Operating Systems, Statistics

University of Manitoba

Sept. 2019 – May 2021 (transferred)

Honours Bachelor of Science, Computer Science

- 4.45/4.50 GPA

EXPERIENCE

McGill University Robotics Team

Sept. 2022 – Present

Team Member

- Wrote software for an autonomous underwater vehicle (AUV) using ROS, Python, C++, and Arduino code
- Assisted in deploying and testing the AUV
- Worked with electrical engineers to integrate sensors into the robot's software system
- Created a package for publishing state measurements from an IMU
- Used CMake and Catkin to build ROS packages for the AUV

Code Ninjas Winnipeg

May 2022 – Aug. 2022

Code Sensei

- Taught coding skills to children ages 8-13

McGill University

Jan. 2022 – Sept. 2022

Tutor

- Independently tutored university students in math and computer science

University of Manitoba Bioinformatics Lab

May 2020 – Aug. 2020, May 2021 – Aug. 2021

Intern

- Developed a citizen science game in Unity for solving bioinformatics problems
- Created security for a server containing experiment data using Bcrypt and JsonWebToken
- Designed and developed a frontend for the server for easy data visualization
- Used MongoDB to maintain a backend for the server
- Expanded upon a pipeline for fetching and parsing genomic data with BioPython
- Co-authored 2 papers, one of which was presented at the International Conference on the Foundations of Digital Games. Won "Best Paper Award"

PROJECTS

X-ray image classifier

Dec. 2022 - Present

- Designed and trained a convolutional neural network to classify chest x-ray images as either pneumonia or normal

Portfolio Website

July 2022 – Aug. 2022

- Self taught React JS, then created a portfolio website that is hosted on GitHub pages
- <https://mrmondrian.github.io/portfolio/>

GeSort

May 2020 – Aug 2020, May 2021 – Aug. 2021

- A citizen science game for solving the genome sorting problem <https://gesort.cs.umanitoba.ca:9001/>

BOPAL 2.0

May. 2021 – Aug. 2021

- An algorithm for predicting genome ancestries in bacteria realistically using operons

SKILLS & INTERESTS

Skills:

- Programming languages: Java, Python, Ocaml, C/C++/C#,
- Web development: Node JS, Mongo DB, Javascript/HTML/CSS, React
- Game development: Unity/C#
- Works well independently and in a team-setting
- English (native proficiency), French (elementary proficiency)

Interests:

- Machine learning (Python/ScikitLearn/Tensorflow)
- Robotics (Arduino, ROS, CMake/Catkin, Python, C++)
- Computer graphics (OpenGL/Java)
- Plants/botany

PUBLICATIONS

De Leon Pereira, R., Tan, A., Bunt, A., Tremblay-Savard, O. (2021) "Increasing player engagement, retention and performance through the inclusion of educational content in a citizen science game." <https://dl.acm.org/doi/10.1145/3472538.3472554>

Chua, M., Tan, A., Tremblay-Savard, O (2021) "BOPAL 2.0 and a study of tRNA and rRNA gene evolution in Clostridium" <https://www.worldscientific.com/doi/10.1142/S0219720021400072>