

# Anthony Tan

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## EDUCATION

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### **Honours Bachelor of Science** September 2019 – May 2021

University of Manitoba

- Computer Science Honours
- 4.45/4.50 GPA

### **Honours Bachelor of Science** September 2021 – May 2023 (anticipated)

McGill University (transferred)

- Computer Science Honours
- 4.0/4.0 GPA

## WORK EXPERIENCE

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### **Intern** Summer 2020 & 2021

University of Manitoba Bioinformatics Lab

Project: GeSort

- A citizen science game where players' solutions to puzzles are used to infer possible ancestral gene orders in bacteria
- Supervised by Dr. Tremblay-Savard
- Worked on game development in Unity
- Maintained and added security to a server containing experiment data
- Co-authored a paper about the project presented at the International Conference on the Foundations of Digital Games. Won "Best Paper Award"

Project: BOPAL 2.0

- An algorithm for inferring ancestral gene orders of bacteria genomes
- Considers groups of genes as operons
- Maintained and expanded upon a pipeline for fetching and parsing genomic data
- Co-authored a paper

### **Code Sensei** Summer 2022

Code Ninjas Winnipeg

- Taught coding skills to kids
- Helped kids with coding projects
- Created Minecraft mods designed to entertain kids
- Watched 25 kids, ensured they were having fun and being safe

**Tutor** January – September 2022

McGill University

- Independently tutored University Students in Math and Computer Science
- Ex: Honours Algorithms and Data Structures, Programming Languages and Paradigms, Introduction to Computer Science

## **HONOURS & AWARDS**

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**Best Paper Award** September 2021

International Conference on the Foundations of Digital Games

- Awarded “Best Paper” to *“Increasing player engagement, retention and performance through the inclusion of educational content in a citizen science game”*

**NSERC Research Grant** May 2021

National Science and Research Council of Canada

- Awarded \$8000 assist to in research at the University of Manitoba Bioinformatics Lab Summer 2021
- Research supervised by Dr. Olivier Tremblay-Savard

**UMSU Undergraduate Research Award** May 2020

University of Manitoba Student Union

- Awarded \$7000 assist in research at the University of Manitoba Bioinformatics Lab Summer 2020
- Research supervised by Dr. Olivier Tremblay-Savard

**University of Manitoba President’s Scholarship** September 2019, 2020, 2021 (declined)

University of Manitoba

- Awarded for high academic achievement

**University of Manitoba Retention Scholarships** October 2020

University of Manitoba

- Awarded for maintaining a high GPA throughout first two years of undergrad

**UM Entrance Scholarship – Tier 1** September 2019

University of Manitoba

- Awarded for high academic achievement in high school

**Bell MTS Scholarships** October 2021 (declined)

University of Manitoba

- Awarded for high academic achievement

**UMSU Scholarship** July 2021 (declined)

University of Manitoba

- Awarded for high academic achievement

## PUBLICATIONS

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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>

## SKILLS

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- Java, Python, Ocaml, C/C++/C#, Node JS, Mongo DB, Javascript/HTML/CSS, React, Unity
- Machine Learning
- Robotics
- Computer Graphics
- Strong quantitative reasoning
- Analytical writing