Bryce Ainsley Ang Sanchez

<u>brycesanchezwork@gmail.com</u> (preferred) | +6580102545 | Singapore | <u>LinkedIn</u> | <u>GitHub</u> Seeking a May 2024 - July 2024 internship

Education

National University of Singapore

August 2021 - June 2025

- Bachelor of Computing (Honors) in Computer Science with a 2nd Major in Mathematics
- Recipient of the ASEAN Undergraduate Scholarship for my performance at the International Math Olympiad
- GPA: 4.72 (honors, highest distinction) (transcript)
- Relevant Coursework
 - o Computer Science: Discrete Structures (A+, Top Student Award), Data Structures and Algorithms (A+, Top Student Award), Design and Analysis of Algorithms (A+, Top Student Award), Database Systems (A+), Parallel and Distributed Algorithms (A+), Computer Graphics (Current)
 - o Mathematics: Calculus (A+), Linear Algebra 1 (A+), Multivariable Calculus (A), Combinatorics and Graphs 1 (A+)

Awards and Achievements

• International Mathematical Olympiad (IMO) - 1 Silver, 2 Bronzes

2019 - 2021

• Philippine Mathematical Olympiad (PMO) - 3 Time National Champion

2019 - 2021

Codeforces - Expert Rating (Max Rating 1870)

Ongoing

• National Olympiad in Informatics Philippines (NOI.PH) - Top 30 in National Eliminations

2021

Work Experience

• National University Singapore - Undergraduate Teaching Assistant

CS1231S Discrete Structures

Aug 2022 - Nov 2022, Aug 2023 - Present

- Taught a class of 20 students for 2 hours per week and graded 2 assignments
- Feedback score: 4.3/5.0 (Feedback)
- CS3230 Design and Analysis of Algorithms

Jan 2023 - April 2023

- Taught a class of 24 students for 1 hour per week and graded 2 assignments
- Feedback score: 4.0/5.0 (Feedback)

• Huawei - Intern May 2023 - July 2023

- Assigned with speeding up the compilation time of a C++ codebase compiled using CMake
- o Made a shell script that only compiles specific to find the bottleneck in the compilation process
- Gained more familiarity with C++, CMake, and shell scripting

Personal Projects

• CavernChef (GitHub)

May 2022 - July 2022

- o Uses Unity and C#. A rogue-like tower defense game with a variety of towers, upgrades, and enemies.
- I mainly worked on towers, projectiles, and enemies. Completed with Kevin Tjan.

AI for CS2109S Introduction to AI and Machine Learning

March 2023

- Uses Python. An AI designed to play the board game breakthrough implemented using the minimax algorithm with alpha-beta pruning and a customized heuristic function.
- Tried a first version of a heuristic computed as the weighted sum of several sub-heuristics, and a second version with modified sub-heuristics. Both versions went up to a depth of 6. Did some test runs to see which is better and what weights work best.
- o Ranked 10th place out of 271 with a 86.4% win rate out of 538 matches.

• Discord Bot (GitHub)

August 2022, December 2022

 \circ Uses Python. A personal Discord bot with a few basic commands.

Skills

- **Programming Languages**: Python, C++, Java, C#, C, SQL, Bash
- Frameworks/Tools: Google Sheets, Unity, LaTeX, shell scripting
- Languages: English (proficient), Chinese, Japanese