# TIMOTHY TEW | COMPUTER SCIENCE (ADVANCED)

tewtimothy@gmail.com 0468 899 686 Adelaide, SA 5000 LinkedIn - https://www.linkedin.com/in/timothy-tew/ GitHub - https://github.com/Timoisgr8 Online Portfolio - https://timoisgr8.github.io/my-portfolio/ Development Environment: Window Subsystem for Linux in VSCode

# **Professional Summary**

High-achieving Computer Science student with a strong academic record and a passion for problem-solving.

Skilled in developing efficient algorithms and leveraging data structures to tackle complex challenges. Primarily proficient in Python with experience in C++ and a willingness to learn new languages.

Hands-on experience in library creation, full-stack development, game development, and research.

## Technical Skills

C++ (3 yr)
 Python (2 yr)
 HTML (1 yr)
 MySQL (1 yr)

## Education

[99.65 / 99.95] - Australian Tertiary Admission Ranking

Achieved maximum selection rank of 99.95, including bonus points.

Subjects: Specialist Mathematics, Mathematical Methods, Physics, Chemistry, Biology.

**[6.933 / 7 GPA]** – Bachelor of Computer Science (Advanced), University of Adelaide

Notable Subjects: Object-Oriented Programming, Programming (MATLAB & C), Algorithms & Data Structures, Algorithm & Data Structure Analysis, Topics in Computer Science.

# **Industry Experience:**

**2025:** Conducting research as part of the "Advanced Topics in Computer Science" course, focusing on a Facebook dataset where teachers discuss AI. Applying natural language processing (NLP) techniques to extract key insights, identify discussion topics, and refine Python programming skills.

**2024**: Researched Social Network Analysis, using Python to compare clustering algorithms. Created ground-truth clusters based on Star Wars lore and evaluated algorithm performance against these benchmarks.

## **Projects**

Python Probability Library (Mar. 2025)

Available : <u>GitHub</u> | <u>PyPi</u>

Created a probability library to simulate games and empirically calculate outcomes, strengthening my mathematical and programming skills in preparation for quantitative trading roles. This project provided handson experience with Python, library development, and the application of probability concepts to real-world scenarios, offering deeper insights into the mathematical models used in the field.

## Past Achievements / Awards

- Australian Mathematical Olympiad Committee Senior Contest 2019 – Honourable Mention
- Australian Intermediate Mathematics Olympiad
  2018 & 2019 Certificate of Distinction

### Interests

- Problem-Solving: Passionate about tackling complex problems, particularly in combinatorics and probability.
- Bouldering: Enjoys problem-solving in physical challenges, dedicating 4–8 hours weekly.
- Learning: Enthusiastic about acquiring new knowledge and skills.

### Communities

Competitive Programming Club