Zhiyang Lu

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EDUCATION

National University of Singapore   Jul 2022 – Present
Bachelor of Computing in Computer Science, GPA: 4.94/5.00   *Singapore*
- **Special Programmes:** NUS College - the honours college of NUS, Second major in Quantitative Finance.
- **Coursework:** Programming Methodology, Data Structures and Algorithms, Computer Organisation, Design and Analysis of Algorithms, Discrete Structures.

Rangitoto College   Jan 2017 – Nov 2021
International Baccalaureate DP, Grade: 45/45 (Valedictorian / Dux Litterarum)   *Auckland, New Zealand*
- **Coursework:** Mathematics AA HL, Physics HL, Chemistry HL, English LL SL, History SL, Mandarin SL.
- **Activities:** IBDP NZ Top Scholar, Academic Top Scholar 2019 & 2020, Chinese Night Organisational Committee, Founder of Maths Competitions Club.

ACHIEVEMENTS

NZ International Mathematical Olympiad Squad Member   2021
New Zealand Mathematical Olympiad Committee   *Auckland, New Zealand*
- Selected as one of 12 representatives for New Zealand to compete in international level maths Olympiads.
- Honourable Mention in Asian Pacific Mathematical Olympiad, Silver Medal in New Zealand Mathematical Olympiad, Bronze Medal in Australian Mathematical Olympiad.

NZQA Outstanding Scholar   2020 & 2021
New Zealand Qualifications Authority   *Auckland, New Zealand*
- Ranked top 50 among a national cohort of roughly 160,000 students.
- Outstanding pass in Calculus and Physics (2020 & 2021), outstanding pass in Chemistry (2021), and scholarship pass in English (2020).

EXPERIENCE

Sales & Technical Support   Mar 2022 – Jul 2022
iStore, Full-time   *Auckland, New Zealand*
- Recognised as top sales staff with over 100k monthly sales.
- Performed numerous software jobs such as restores, data transfers, and basic set-ups.

Maths Competitions Instructor   Apr 2022 – Jul 2022
A+ Global Academy, Part-time   *Auckland, New Zealand*
- Designed training questions, prepared practice materials, and conducted both online and in person lectures.
- Marked students' solutions, supervised contests, and provided critical feedback to spur improvement.

PROJECTS

Monopoly Board Game Simulator | *Java*   Apr 2023 – Jul 2023
- Involves complex class design that demonstrates strong object-oriented programming language understanding through applying relevant OOP concepts such as, inheritance, polymorphism, and encapsulation.
- Acquired comprehensive knowledge and understanding of well-documented standard libraries (Java Standard Library) as well as their wide range of pre-built classes, methods, and data structures.

Course Projects | *Java, C / C++, Python, JavaScript*   Aug 2022 – Present
- Coded numerous different complex algorithms such as single-source shortest path, minimum spanning tree, travelling salesman, stable matching, min-cut max-flow, and dynamic programming.
- Worked extensively with all prominent programming data structures and algorithms and obtained thorough understanding of their key characteristics and invariants.

TECHNICAL SKILLS

Languages: Java, C / C++, Python, JavaScript, HTML/CSS, R, MATLAB
Frameworks / Libraries: JUnit, NumPy
Developer Tools: GitHub, Visual Studio Code, IntelliJ, CLion, PyCharm, VIM