

# MIKE GAO

## Education

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|---|-----------------------|
| <b>University of Waterloo</b><br>Undergraduate Computer Science 2027            | Sept. 2022 to Current |
| <b>Wilfrid Laurier University</b><br>Undergraduate Business Administration 2027 | Sept. 2022 to Current |

## Summary of Qualifications

- Programming languages: Java, JS, Python, C, C++, DrRacket, Linux Shell/Bash
- Web development: HTML, CSS
- DevOps: Git, Jenkins
- Excellent leadership and communication skills as demonstrated in instructor and volunteer positions
- A software development passion and a strong desire to grow in my programming experience

## Projects

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| <b>Recursive Terrain Generation</b>  | Jan. 2022 to Feb. 2022 |
| <ul style="list-style-type: none"><li>• Exceeded high school recursion project expectations by generating terrain models of varying detail, irregularity, and perspectives using exclusively Java</li><li>• Mathematically integrated the projection of 3D quadrilateral lattices onto a 2D plane through linear interpolation</li></ul> |                        |

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|---|----------------------|
| <b>Blast Puzzle Game (pygame)</b>   | June 2023 to Current |
| <ul style="list-style-type: none"><li>• Developing puzzle game "Blast" inspired by Activate Games minigame using pygame</li><li>• Learned the principles of object-oriented programming creating reusable classes to enhance versatility and maintainability of the code</li><li>• Included sleek graphics and animations, particle effect classes, and a randomized level generation feature</li></ul> |                      |

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|---|------------------------|
| <b>Quizzing Discord Bot (node.js)</b>   | Nov. 2020 to Dec. 2020 |
| <ul style="list-style-type: none"><li>• Proactively fostered youth learning and engagement through the COVID-19 pandemic by developing a chatbot, "Gangstwill", for the OCAC discord server</li><li>• Imported and organized a diverse range of quizzing question banks, leveraging file manipulation techniques to allow for seamless randomized question retrieval by the chatbot. Created custom commands to retrieve questions of different types and from specific chapters</li><li>• Programmed additional features from gacha-inspired draw commands to an economy system that tracks each user's virtual currency using file manipulation, all to provide interactive and gamified aspects to the user experience</li></ul> |                        |

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|---|-------------------------|
| <b>Personal Website (HTML, CSS, JS)</b>   | July 2023 to Sept. 2023 |
| <ul style="list-style-type: none"><li>• Self-taught HTML and CSS through building a personal website portfolio hosted on mikegao.ca with a sleek, professional, and interactive design</li><li>• Created dynamic website UI elements including a navigation bar, transitions, animations, robust support for different screen sizes, and tabs</li><li>• Developed functional contact form, using a specialized JS script to collect and direct messages to a google sheets file</li></ul> |                         |

## Work Experience

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|---|------------------------|
| <b>Dragon House Restaurant</b><br>Packaging and Transportation Executive  | Mar. 2020 to July 2020 |
| <ul style="list-style-type: none"><li>• Worked alongside cooks and restaurant employees to ensure smooth operation and delivery to customers</li><li>• Packaged and prepared food while catering towards each customer's specific needs or requests</li></ul> |                        |

## Contact

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## Volunteer Experience

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|---|------------------------|
| <b>Canfly Education Canada</b><br>Programming Instructor  | Nov. 2021 to Mar. 2022 |
| <ul style="list-style-type: none"><li>• Educated youth of many ages (8-12) on programming concepts (conditionals, loops, variables) using Java, explaining complex and abstract topics in layman terms</li><li>• Utilized IDEs such as Eclipse and Raspberry Pi, investing significant time into lesson prep and one-on-one student assistance</li><li>• Organized course content and curriculum with Canfly management to enrich student learning experience and meet Canfly's goals</li></ul> |                        |

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|--|-------------------------|
| <b>Ontario Mennonite Music Camp</b><br>Leader in Training<br>Conrad Grebel University College  | Aug. 2022 to Sept. 2022 |
| <ul style="list-style-type: none"><li>• Employed leadership and communication skills to apply musical talents for teaching and nurturing youth abilities</li><li>• Facilitated meetings with camp counselors and volunteers as well as organizing and designing interactive activities</li></ul> |                         |

## Awards

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|---|------|
| <b>American Protégé</b><br>International Music Talent Competition 2020<br>Gold Medalist | 2020 |
| Duet Piano with Clarissa Chan   |      |
| <b>Royal Conservatory of Music</b><br>Helen Tough Murray Scholarship                    | 2019 |
| <b>Royal Conservatory of Music</b><br>ARCT Gold Medal                                   | 2019 |
| Highest mark in ARCT Piano Performer's Examination                                      |      |
| <b>Royal Conservatory of Music</b><br>Level 10 Piano Gold Medal                         | 2017 |
| Highest mark in Grade 10 Piano Performer's Examination                                  |      |