
Summary of Qualifications

- Programming Language: Strong in C, Python, MATLAB, and R. Also proficient in Excel and add-in VBA tools.
 - Proficient in HTML, having one term co-op experience in editing webpage for university courses
 - Having one year experience in Python, contributing to a project that are used to track the potential virus taker in a pandemic
 - Outstanding collaborative skills and analytical skills established through work in a project team Ansker, where I sort out data using R and write reports with a team
 - Great Creativity developed through work as a video creator
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Education

University of Waterloo

- Candidate for Bachelor of Mathematics, Honours Mathematics
- Having 90%+ on cumulative GPA and major average

Relevant course work

CS 136 Elementary Algorithm Design and Abstract Data Type (Language: C)

- Used Linked list to implement a graph, and then used Dijkstra Algorithm to solve shortest path problem of a graph in assignment project
- Studied Dynamic Array, ADT Pool, and how to design own ADTs for a problem
- Wrote a card gacha game in C (Drawing cards randomly from a pool) and published on GitHub and Repl.it(<https://github.com/y39xing/Gacha>)

CS 234 Data Types and Structures (Language: Python)

- Studied a variety of data structures like AVL Tree, Graph, Priority Queues
- Used Adjacency Matrix to implement ADT Undirected Graph in Python and solved a problem for monitoring potential virus taker in a pandemic

STAT 231 Statistics (Language: R)

- Studied common statistic models like Binomial, Poisson, and Gaussian model
- Analyzed purchase data from a business company using R and conduct a complete data report by using confidence intervals and hypothesis tests

ECON 254 Economics of Sports (Excel and add-in VBA tools) – Currently taking this course

- Conduct an information backgrounder of Home game attendance, team's winning rate and team's payroll of NBA team Houston Rockets
 - Using Excel and add-in VBA tools to do linear regression and test the significance of slope
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Work Experience

Remote Course and Technical Support Assistant at University of Waterloo (2021)

- Design and edit courses' webpages in HTML
- Use Maple to create assignment and exam questions with algorithms that random parameters
- Modify course materials in LaTeX, making them easier to read and tidy in format

Data Analyst at project team "Ansker" (2018-2019)

- Use R to manage user' data for the Ansker app, construct users' portrait
 - Provide suggestions for improving user experience, resulting in a 150% increase on number of users over a year
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Hobbies

Make and Publish Videos related to Hearthstone (a video game)

- Use PR and OBS to edit Hearthstone video records and have published 100+ videos on Bilibili
- Have 400+ followers and get more than 200,000 video views in total