Alicia Tran

trana41@mcmaster.ca | linkedin.com/in/trana41 | github.com/alicia4550

EDUCATION

BACHELOR OF ENGINEERING, SOFTWARE AND BIOMEDICAL ENGINEERING
McMaster University, Hamilton ON

- Enrolled in 4th year of the 5-year Integrated Biomedical Engineering and Health Sciences co-op program
- Cumulative grade point average of 9.3 on 12 point scale

RELEVANT COURSES

LINEAR OPTIMIZATION

- Model solutions for engineering and science problems using linear optimization

SOFTWARE ENGINEERING PRACTICE AND EXPERIENCE

- Solve computational problems with an experimental approach
- Theoretical/algorithmic analysis

DATA STRUCTURES AND ALGORITHMS

- Introduction to algorithmic design strategies
- Correctness and performance analysis

LANGUAGES/ SOFTWARE

- Java
- Python
- C, C#
- MATLAB
- R
- HTML
- CSS
- JS
- Git

WORK EXPERIENCE/EXTRACURRICULARS

PRESIDENT
McMaster Competitive Programming, April 2021 – Present

- Represented McMaster University at the 2020 ICPC East Central North America Region Programming Competition
- Lead team in developing programming contests and workshops for students

APPLICATION DEVELOPER
Canada Revenue Agency, May 2020 – Present

- Created interactive web-based game to teach tax concepts
- Optimized game based on feedback from internal pilot of 100 participants
- Work on full stack development of web application to manage accessibility assessments

WEBSITE DEVELOPMENT LEAD
McMaster Makers, August 2019 – Present

- Create a site using HTML, CSS, and JS to advertise club activities and promote club membership
- Use Google Firebase to implement log-in system and event registration for club members

PROJECT WORK

CLEARLY
January 2021 – Present

- Work with team to design system using natural language processing to simplify medical reports into layman's terms
- Plan and execute pilot study to evaluate effectiveness and usability of prototype

GAIT-MONITORING SHOE INSOLE SYSTEM
January – April 2021

- Wired Arduino circuit with pressure and absolute orientation sensors
- Wrote MATLAB program to calibrate sensors and perform data acquisition, filtration, analysis, visualization, and validation

STOCK RECOMMENDATION PROJECT
January – April 2020

- Worked alongside team to create a web-based application that recommends stocks to users based on stock growth and budget
- Analysed large data set using searching, sorting, and graphing algorithms