

# MIAN RAFAY

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## PROFESSIONAL SUMMARY

A creative, divergent thinking Software Engineer intern with extensive expertise within different coding languages. Proceeding to my seventh year of passionate, robust coding involving the creation of high-quality programs. Holding the potent ability to effectively deliver and assist valuable solutions and developments to a hiring company. Prepared to think outside the box and strengthen the software community by quickly catching on and adapting to new forms of intelligence and the latest technologies. Currently pursuing an Honors Computer Science degree at McMaster University.

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## SKILLS

PROGRAMMING LANGUAGES: Python, C++, C#, C, Java, JavaScript, HTML, CSS, PowerShell

TECHNOLOGIES: Word, PowerPoint, Excel, React.js, AutoCAD, Arduino, Windows

SOFT SKILLS: Critical Thinker, Problem Solver, Attentive Learner, Motivated, Enthusiastic, Detail Oriented, Organized

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## EXTRACURRICULAR

HACK THE NORTH CONTESTANT {PASSWORD ENCRYPTER DATABASE} | 2021

Designed and presented a custom-made password encryption program done using C++ which stores encrypted passwords on an SQL database

UTO ROBOTICS COMPETITION FINALIST | 2019

Designed and programmed an NXT robot which qualified for the school team and competed at the Ontario Tech University for the robotics competition. Through teamwork and hard work, our team achieved a position in the finals.

SCARBOROUGH MATH OLYMPICS CONTESTANT | 2017

Selected male representative from the school to participate in the Math Olympics after achieving the highest grade on the Waterloo Math Contest.

ED APP HACK | 2016

Built a prototype of a phone app related to health and showcased it to judges at the event

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## PROJECTS

MATRIX CALCULATOR | C++

Computes addition, subtraction, and multiplication with different order matrices specified by the user

FUNCTIONS INTERSECTION CALCULATOR | PYTHON

Given two functions by the user as input, this program calculates the intersection point of the two functions within a certain interval.

USER PASSWORD AUTHENTICATOR | C#

Checks password syntax of user input to authenticate the password while storing all previous passwords on a file

MEMORY GAME | C#

Randomly generates cards with letters faced down and you must match all pairs

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## EXPERIENCE

HOME-BASED TUTOR | 2019 - PRESENT

Tutoring students from grades 8 - 12 in subjects such as math and computer science.

ELECTIONS CANADA INFORMATION OFFICER | 2021

Directed individuals to the voting sites and answered questions regarding elections

## EDUCATION

BASc, HONORS COMPUTER SCIENCE (CO-OP) | **SEPT 2021 – PRESENT**  
MCMASTER UNIVERSITY

HIGH SCHOOL DIPLOMA | **2021**  
SATEC @ WA PORTER CI

WEB DEVELOPMENT BOOTCAMP | **2020**  
UDEMY

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## RELEVANT COURSES

### COMPSCI 1JC3

Worked with functional programming language, Haskell. Used **recursion**, **pattern matching** and worked with **custom data types**. Developed **critical thinking** skills through a wide range of **complex logic** problems.

### COMPSCI 1MD3

Worked with **object-oriented** programming concepts in **Python**. Familiarity with **SQL** databases, **YAML** files, and **JSON** files. Developed **problem solving** skills through series of problem questions involving **algorithms**.

### COMPSCI 1XD3

Implemented **design patterns** and learned **design techniques**. Used elm and took part in **team assignments** to complete tasks in a **timely manner**.