

# KRISH BHAGIRATH

*Engineering Student*

## PROFESSIONAL SUMMARY

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Motivated engineering student with a strong STEM foundation, programming expertise, and leadership experience (i.e. DECA President, Robotics Programming Lead, etc.). Skilled in innovation, collaboration, and technical problem-solving, eager to excel in roles combining technical and leadership capabilities.

## EMPLOYMENT HISTORY

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### STEM TUTOR

Jan 2021 - Present

*Sandwich Secondary School*

- Tutor local high school students both in-person and remotely in a variety of STEM courses
- Tailor tutoring sessions for every student to cater to different learning styles
- Empower students to take charge of their own learning and building the necessary skills they require for academic success

### DANCE INSTRUCTOR

Sep 2020 - Present

*Windsor Bhangra Club*

- Choreograph and taught cultural dance routines to 15 students aged 6-10 preparing them for local performances
- Collaborate with a group of volunteers to promote teamwork and physical activity
- Customize lessons to improve student weakness' while celebrating improvement

## SKILLS

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Languages: Python, C, C++, Java, Matlab, Arduino, Javascript (novice),  
Tools: Microsoft Office, VSCode, Autodesk Inventor (CAD), Github, Canva, Granta ,  
Other: Problem-Solving, Critical Thinking, Team Collaboration, Leadership, Adaptability, Attention to Detail, Robotics .

## EDUCATION

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### ENGINEERING I

Sep 2024 - Present

*McMaster University*

*Hamilton, ON*

Current GPA: 3.95/4.00

### HIGH SCHOOL DIPLOMA

Sep 2020 - Jun 2024

*Sandwich Secondary School*

*Lasalle, ON*

- Graduated with honors, obtaining a 98% top six average
- Cumulatively awarded over \$20,000 in scholarships for academic and extracurricular achievements

## PROJECTS

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### PAWGRESS

*React-Native, Node.js, Javascript, HTML, CSS, Cobere*

- developed an AI habit-tracker mobile app interpreted inputted habits and provided the user with personalized advice for next steps

### INTELLIPARK

*Arduino, C, Robotics, Circuitry*

- developed a small-scale prototype of an efficient parking garage system that constantly displays the available parking spots in a given lot

### BABY MONITOR

*Python, OpenCV, MongoDB, Raspberry PI*

- creating a computer program and medium-fidelity prototype of a baby monitor that utilizes visual and auditory input for emotion detection and facial recognition
- system interprets baby's needs based on emotions and sounds and notifies parents when needed

## **AUTONOMOUS AIRPORT SYSTEM**

***Python, Autodesk Inventor (CAD), 3D Printing***

created a mechanism to transport luggage from Point A to B using a rotary actuator and 3D-printed parts  
developed Python functions to seamlessly sort through and display data

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## **EXTRACURRICULARS**

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### **DECA CHAPTER PRESIDENT**

***Sandwich Secondary School | 2022 - 2024***

Oversee and manage 30 students in delegating tasks and collaborating with club executives to strategize methods for club improvement.

Organize senior executives to provide younger members with advice from prior experiences increasing chances of success

Participated in the 2022-2023 DECA competition, creating a province-winning business plan.

### **PROGRAMMING TEAM LEAD**

***772 Sabre Bytes FIRST Robotics Team | 2021 - 2023***

Led and managed the programming sector of the team consisting of 10 members through overseeing the team's work, assigning tasks, and setting priorities while reporting back to the director

Provided guidance and taught beginner level members on the foundational concepts and programs required to aid the team in competitions such as C++, and Java.

### **INSTRUCTOR**

***UCMAS Obotz Robotics Program | 2020 - 2022***

Promoted to the level of an instructor through successful completion of the program.

Mentored students of all ages with various challenges encountered to help them all achieve their goals

Gained an in-depth insight into the basics of programming and robotics such as foundation of Arduino boards and circuitry, while working with C-programming.

### **SOFTWARE DEVELOPER**

***McMaster Med-T | 2024 - Present***

one of three members of the software subsection

currently working on developing a computer program for facial detection and emotion recognition, as part of a medium-fidelity smart baby monitor device