# Indika Wijesundera

linkedin.com/indika-wijesundera

McMaster University

**EDUCATION** 

• Bachelor of Applied Science in Computer Science Sept 2018 – May 2021

Hamilton, ON

• Bachelor of Science in Medical Physics, Math Minor

McMaster University Hamilton, ON

EXPERIENCE

• VueReal Inc. Waterloo, ON

Software Developer Sept '19 - April '20

- Used Python and C++ to automate Micro-LED inspection reducing the time to analyze 150,000+ LEDs from several hours
- Used deep learning to improve image processing results with a 99.9% accuracy
- o Created web applications using Node.js to increase inspection efficiency and usability

## • Wijesundera & Associates Law Office

Markham, ON

Web and Graphics Designer July '19 - Present

• Designed the company website wijelaw.com using HTML5 and CSS

o Designed and ran marketing campaigns and ads on the company's social media accounts which amassed over 3000 new engagements.

• Xiris Automation Burlington, ON

Software Developer May '19 - Aug '19

o Designed software for the company's machine vision camera controls as well as its analysis of various weld inspection metrics including temperature and luminosity using OpenCV

- Tested and wrote documentation while following the software development lifecycle
- Worked with C#, C++/CLI, C++, .NET framework, OpenCV, Winsock, SVN, Doxygen, Windows and Linux

• McMaster Mars Rover

Software Developer - Vision Systems

Hamilton, ON Sept '18 - Present

- o Vision Team Lead:Led a team of 6 software developers to help design McMaster University's first Mars Rover to compete in the University Rover Challenge
- o Programmed a Jetson TX2 module to gather sensor data from a LIDAR and stereoscopic camera through ROS
- $\circ\,$  Worked with Python, C++, ROS, Git, OpenCV and Linux

# Projects

- Chess in Python: Fully functioning game of chess written in Python.
- StepSafe in Java: Mapping service for Toronto that avoids areas of high crime when providing directions while optimizing
- Reaction Bot in Python: Facebook chat bot which automatically sends replies to memes sent in group chats.
- Radiation Dose Simulation in Matlab: Simulated alpha particles passing through a patient's body using Monte Carlo simulations.

# EXTRACURRICULARS AND VOLUNTEERING

## • Mathstronauts - STEM Hacks

Hamilton, ON

Jan '20 - Present Mentor

o Provided guidance, leadership and technical expertise to help children from the ages of 9 to 12 design and write code for the first time.

### • Hackathon - DeltaHacks

Hamilton, ON

Jan '20

• Worked in a team of 4 to create a smart grocery list utilizing Google Assistant and web scraping.

### • McMaster AI Society

Participant

Hamilton, ON

General Member

Sept '18 - Present

• Collaborated with students from a wide range of disciplines to create AI projects in Python.

#### • McMaster Sri Lankan Association

Hamilton, ON

PresidentSept '16 - May '18

o Led a team of 10 executive members to plan and organize both cultural and social events for over 100 students in the McMaster community. Held fundraisers to provide education and assistance to underprivileged workers in rural Sri Lanka.

## Programming Skills

- Languages: Python, C++, C, Java, HTML5, CSS, Javascript, ROS, MATLAB, Arduino, Bash
- Tools and Libraries: Git, SVN, OpenCV, Numpy, TensorFlow, Node.js

Sept 2014 - May 2018

Github: github.com/IndiW

Email: IndikaWijesundera@gmail.com