Aswin Visva

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TECHNICAL SKILLS

Programming Languages
Java, VBA, C++, Python, PowerShell, Swift

Web
HTML5, JS, CSS3, SASS

Libraries
TensorFlow, OpenCV, NumPy, Scikit-learn, Pandas, Matplotlib

Frameworks & Technologies
XML, JSON

Software
MS Office Suite (Word, Excel, PowerPoint)

AWARDS

- UTSC Charles Dyer Award
- UTSG InnoMasters Award
- Douglas Allen Engineering Scholarship
- President's Scholarship

EDUCATION

Waterloo University
Management Engineering Co-op
GPA: 3.7
Relevant courses
MSCI 121: Intro to Computer Programming

VOLUNTEER WORK

Laptop Drop **President**

Facilitated donations from SAP Canada and distributed laptops and IPads to over thirty students at Danforth CTI

Michael Garron Hospital **Volunteer**

Played guitar for hundreds of patients in the lobby to help relieve their stress

INTERESTS

Soccer, Guitar, Artificial Intelligence, Skiing, Reading

WORK EXPERIENCE

Process Fusion Inc. | Software Developer — July 2018 – August 2018

- Developed multiple PowerShell scripts to perform health checks on specific applications and address identified gaps such as logging events, verifying TCP ports and checking application turnaround time
- Created XML files to store data such as employee emails, IP addresses, TCP ports and websites

Dr. Oliveria Lab | Research Assistant — October 2018 – Present

- Assisting research professor in Department of Pathology to computationally map out cellular/structural neighborhoods within an image
- Creating a machine learning algorithm capable of neuronal and vessel segmentation with Python

PROJECTS & ACTIVITIES

ConvoBuddy — February 2019

- Built a hat equipped with a Raspberry Pi microcontroller connected to a camera and developed an IOS app to help individuals with Autism maintain eye contact and identify the emotions of others during social interactions
- Used the Google Cloud Vision API to determine the emotion and position of the individual and wrote the data to a Firebase Database, which was displayed real-time in an IOS app along with tips to help the user improve conversational skills
- Won **Best Use of Google Cloud Platform** at QHacks 2019

BikeSafe Helmet — November 2017 – May 2018

- Created a bike helmet with a partner leveraging machine learning and object recognition to detect cars on the road and warn the user when they approached too closely
- Integrated the OpenCV library and the Haar Cascades machine learning classifier to detect vehicles in images sent by a raspberry pi with a camera module
- Earned **1st place prize** at the U of T Engineers Without Borders competition and a **bronze medal** at the 2018 Toronto Science Fair

Sign Language Glove — November 2016 – April 2017

- Created a glove with a partner that translated 30 sign language gestures to speech using Java and Arduino
- Used a classification algorithm to predict the output gesture based on the values of sensors on the glove
- Won a **gold medal for Best Senior Project** at the 2017 Toronto Science Fair