Aswin Visva

Management Engineering

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http://aswinvisva.ga
https://github.com/aswinvisva

TECHNICAL SKILLS

Programming & Scripting 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