SINCLAIR HUDSON

2A Computer Science Student at the University of Waterloo

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EXPERIENCE

Preception Technical Lead, Watonomous

May '19 - present (Part-time)

- Led small groups of core members on certain perception objectives in two week development cycles, using OKRs and Gantt Charts.
- Trained, Tested, and fine-tuned inference models for objetives such as pedestrian detection and traffic light detection.
- Trained YOLOv3 model to detect location and state of traffic lights, enabling the self-driving car to obey traffic light highway safety laws.
- Reviewed and integrated C++ code from core members into the testing and production stack.

Full Stack Developer, Wawanesa Insurance

May '19 - Aug '19 (Full-time)

- Conceptialized and created proof-of-concept innovation projects using agile methodology, presenting ideas and prototypes weekly.
- Created a system that used sentiment analysis to determine the public's opinion of the company on Twitter using AWS.
- Built a system that searches Instagram for posts relevant to insurance claims and displays them on an intuitive dashboard. The post's relevance is determined by a self-trained Tensorflow BERT transformer model.
- Built a mobile app for both iOS and Android using accelerometer and GPS data to analyse user driving habits.

Project Manager, ScoutTech Outfitters

Oct '15 - Aug '18 (Part-time)

- Created Shopify Store, ScoutTech's current storefront.
- Automated invoicing from database sales information, decreasing order processing times by 25%.
- Led store launches on Wish Walmart, Jet, Pricefalls, Shop.com, Fruugo, Best Buy, and Newegg through Channeladvisor.
- Created proprietary Java application that takes product attributes and transforms them into custom spreadsheets to upload to various databases. Increased adding efficiency by 200%.

PERSONAL PROJECTS

Conduct: Gesture Controlled Media Playback

- Designed intuituve gesture-controlled interface using webcam video.
- Built, trained, and tested YOLOv3 network to detect and classify hands into 6 different gesture states.

AJAX: Artificial Intelligence Voice Recognition

- Classified 18 words using a Google Tensorflow LSTM Classifier.
- Created a Python script using PyAudio and Google Sheets API to automatically record and label data, creating a large dataset quickly.

LANGUAGES

Languages: Python, C, C++, Javascript, Java, Scheme, HTML & CSS

Frameworks: OpenCV, Tensorflow, Numpy, React, Node.js, ROS, OpenVINO

Tools: AWS (SageMaker, EC2, Lambda, DynamoDB), Jetbrains Suite, Adobe Suite, Autodesk Suite, Linux

SKILLS & TRAITS

Avid, quick learner

Passionate & hard working

Always up for a challenge

Creative & innovative

LEADERSHIP & AWARDS

Venturer Company President

Governor General's Bronze Medal

Chief Scout's Award, Scouts Canada

University of Toronto Book Award

Bronze Cross & Standard First Aid

INTERESTS

Whitewater canoeing

Visual art & design

Rock climbing

Archery