



SPENCER HAYES-LAVERDIÈRE

COMPUTER ENGINEER

Contact

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Languages & Tech

- Python
- Keras
- TensorFlow
- OpenCV
- Java
- BitBucket & Git
- Linux
- NGINX
- HTML/CSS
- C

Education

BASc Computer Engineering
University of Ottawa
2016-2020

Professional Profile

Computer Engineer with experience in neural networks, autonomous vehicles, and computer vision. Obtained a Computer Engineering degree from the University of Ottawa. Completed a capstone on a cooperative autonomous vehicle system.

Projects

Music Genre Classification with a Neural Network

- **Multi-layer feed forward** neural network
- Built using **Keras** and **TensorFlow**
- Model had an averaged accuracy of 64% (**6x improvement** over random guess)

Cooperative Autonomous Vehicle System

- **Mask R-CNN** neural network
- **Image processing** and path planning was done in Python with **OpenCV** and **NumPY**
- Land robot powered by a **Linux** based RaspberryPi which featured a **NGINX** server for video streaming

Experience

GoDigital Kingston

Founder · April 2019 – Present · Kingston, ON

- Founded a digital marketing company that specialised in growing sales through social media and optimized online stores
- Transitioned one store to ecommerce which earned over \$18k in sales in 5 weeks

University of Ottawa

MakerMobile instructor · April 2018 – March 2020 · Ottawa

- Taught engineering skills such as coding and 3D printing to children and teenagers