Yash Matharu

(289) 788-9214 | ✉ matharuy@mcmaster.ca | 🏠 yashmatharu.com | yashm07 | M yashmatharu | in yashmatharu

EDUCATION

McMaster University   *Hamilton, ON*
B.Eng Electrical and Biomedical Engineering (Co-op) | GPA 4.0   *Sept. 2020 - EXPECTED 2025*
Awards Dean's Excellence Scholarship ($7,500), TC Energy Community Leaders Scholarship ($2,500)
Relevant Courses Data Structures and Algorithms, Principles of Programming, Circuits and Systems

SKILLS

Languages Python, C, Javascript, HTML/CSS, MATLAB
Machine Learning Tensorflow, Keras, Numpy, Pandas, Scikit-learn, Seaborn, Matplotlib
Web Development React.js, Node.js/Express.js, MongoDB, Firebase, Bootstrap
Tools Git, Jupyter, Colab, Figma

EXPERIENCE

Research Assistant, Deep Learning   *Hamilton, ON*
McMaster University   *May. 2021 - Aug. 2021*
- Developed deep convolutional neural networks to classify 10 different algae cells in drinking water
- Used transfer learning and fine-tuned pre-trained image classifier models resulting in 85% test accuracy with 150 images in dataset
- Implemented object detection algorithms to accurately detect pathogenic cysts in real-time for water treatment

Languages/Tools: Python, Tensorflow, Keras, Jupyter

Innovator | ⎘   *Toronto, ON*
The Knowledge Society (TKS)   *Aug. 2020 - Jan. 2021*
- Researched and learned about next-gen topics such as Artificial Intelligence and Blockchain
- Consulted for MIT non-profit organization, Pathcheck, to develop user acquisition strategies in new locations

Road Tour Crew Member   *Hamilton, ON*
Camp 31   *Jun. 2019 - Sept. 2021*
- Communicated effectively with 100+ customers each day regarding orders, comments and any complaints
- Fulfilled customer orders in a timely manner to maintain high standards of customer service

PROJECTS

Kaggle Competitions | ⎘ ⎇   *Aug. 2021*
- Competed in multiple Kaggle competitions using data science and ML tools

Languages/Tools: Python, Numpy, Pandas, Scikit-learn, Matplotlib, Seaborn, Tensorflow, Keras

RPi Autonomous Car | ⎇   *Present*
- Building an autonomous car capable of detecting garbage and picking it up to move to another location

Languages/Tools: Python, Tensorflow Lite, OpenCV

YelpCamp | ⎘ ⎇   *Jul. 2020*
- Developed a website which displays campgrounds in the area and their information such as, prices, location, reviews and description
- Utilized multiple APIs to add different features such as the Google Maps API

Languages/Tools: Javascript, Node.js, Express.js, MongoDB

EXTRACURRICULARS

Product Manager | ⎘ ⎇   *Hamilton, ON*
DSC McMaster   *Dec. 2020 - Feb. 2021*
- Led a team of developers, business analysts, and designers to create award-winning vaccination tracking application
- Conducted 15+ user interviews to gain an in-depth understanding of challenges within healthcare

Languages/Tools: React Native, Firebase

Student Ambassador   *Hamilton, ON*
McMaster University - Faculty of Engineering   *Sept. 2020 - Sept. 2021*
- Engages with students and families at school events to encourage students to pursue careers in engineering
- Speaks at recruitment events and panels to 400+ prospective students about McMaster Engineering