

JACOB KELLY

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EDUCATION

University of Toronto

Computer Science (Focus in AI) and Mathematics *GPA:4.0/4*

Enriched Intro to Theory of Computation (enr.), Intro to Neural Networks (audit)

Toronto, ON

Sep 2017 — May 2021

SKILLS

Machine Learning: TensorFlow, NumPy, MATLAB
Software Development: Python, Java, C++
Version Control: Git
Web Development: HTML, CSS, JavaScript, jQuery

EXPERIENCE

Computer Vision Engineer *TensorFlow*

Autonomous Rover Team, University of Toronto Robotics Association

Toronto, ON

Sep 2017 — Present

- Implemented, trained, tested, and tuned hyperparameters of computer vision model for object detection for International 2018 Intelligent Ground Vehicle Competition.
- Led team of 3 members in implementation of TensorFlow port (darkflow) of YOLOv2 object detection model on NVIDIA Jetson TX2 using kanban software development methodology.

Web Developer *HTML, CSS, JavaScript, jQuery*

Glenforest STEM

Mississauga, ON

Feb 2016 — Jun 2017

- Designed and self-developed (full-stack) website for ~ 500 unique visitors/month in promoting conference for ~ 2000 delegates.
- Created extensive documentation of codebase for future web developers, reducing training time to 25 hours.

Health Lab Intern *Android SDK, Estimote API*

Cossette

Toronto, ON

Jul 2016 — Aug 2016

- Developed (full-stack) native Android Application, Pocket Guide, a tool to guide both visitors and patients through SickKids Hospital using Estimote Beacons.
- Led team of 2 members in design and development of UI/UX, noise reducing and pathfinding algorithms.

PROJECTS

Adversarial Examples in MNIST *TensorFlow*

github.com/jacobjinkelly/adversarial-mnist

- Generated adversarial examples to fool state of the art MNIST classifier.

Robby the Robot *NumPy*

github.com/jacobjinkelly/robbie-the-robot

- Genetic algorithm for evolving strategies for a virtual cleaning robot.

AWARDS

Certificate of Distinction, Euclid Mathematics Contest, University of Waterloo

Apr 2017

Finished in top 15% of 17,000 participants in national math competition.

1st Place, ECOO Programming Contest

Mar 2017

Achieved highest score amongst over 60 teams from across Peel Region, completing 5 algorithmic problems in 3 hours. Went on to place Top 10 in Central Ontario.

INTERESTS

Running

Working towards my first 10K this summer

Reading

I read about 35 books a year

Machine Learning

Currently completing Andrew Ng's Deep Learning specialization

Misc.

3Blue1Brown, The Nerdwriter, Ted Chiang's Short Stories, Westworld