# Adam Sigal

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# **EDUCATION**

# Master's of Electrical and Computer Engineering – ML, Robotics

Mila (Quebec Artificial Intelligence Institute) / McGill University

Project: Crowd-Aware Robot Social Navigation

Using attention-based DRL framework to learn robot navigation policy accounting for social conventions and efficiency.

**Bachelor's of Computer Science** 

University of Montreal

May '19



# **EXPERIENCE**

#### mgmtconfig (2.6k★; Open Source Configuration Management tool)

Remote

Project: Next generation automation tool with fast, modern, distributed systems approach

Jan. '19 - Nov. '20

Sep '20 - present

Expanded software infrastructure and functionality

Learned best practices for remote workflows on a large-scale project

Golang, Bash

Loto-Quebec Montreal, Canada

Project: DevOps – Modernisation of development and deployment environments and workflows

Migration of Puppet and Ansible to most recent versions across ~100 company servers

Bash, GitLab Cl, Docker, Ansible, Puppet, Jenkins

May '19 - Aug. '19

### Mila - Quebec Artificial Intelligence Institute

Project: Duckietown Educational Platform – Al Gym simulator (400★)

Montreal, Canada May '18 - Aug. '18

Developed heuristics-based procedural "town" generator, a key component for "Al Driving

Olympics" Competition at NeurIPS and ICRA; named author in announcement paper

Python



## **AWARDS**

2020-22 Fonds de Recherche – Nature et Technologies

2014 Alberta Rutherford Scholarship for Academic Excellence

2018 IVADO UROP Scholarship

2017 Dean's List - Note of Excellence

2014 Queen's University Excellence Scholarship

IVADO Funding Program for Undergraduate Research

University of Montreal Queen's University

Alberta Ministry of Education

Quebec Government Graduate Research Grant



### **PROJECTS**

# Effects of Uncertainty Measures on Bayesian SegNet

Fall '21

Reproduced Bayesian SegNet (Kendall et al., 2019) and compared performance when using different uncertainty measures.

### Addressing imPAIRED Observations

Winter '21

Trained RL game-playing agent against an adversarial environment. Explored effects of allowing adversary to modify game settings and observation domain of agent.

Is LESS More? Applying Advances in Models of Human Behavior to "Snake"

Winter '21

Applied probabilistic human-robot interaction behavior model LESS to "Snake" game to emulate human path planning.



### SOFTWARE

Languages / Tools: Python, Java, PyTorch, Linux, Git, Bash, SQL, Docker Skills: Machine / Deep Learning, Robotics, Computer Vision, Reinforcement Learning, Software Engineering



## **RELEVANT COURSEWORK**

Deep Learning, Machine Learning, Al, Robotics, Robot Learning, Statistical Computer Vision, Databases, Math. Analysis, Al Ethics, Game Theory, Data Structures & Algorithms, Software Engineering, Software Design, Neuroscience