Daniele Reda

X660, 2366 Main Mall, V6T 1Z4, Vancouver, BC

dreda@cs.ubc.ca
cs.ubc.ca/~dreda

EDUCATION

University of British Columbia
PhD in Computer Science
Sep. 2019 – ongoing
Vancouver, BC, Canada

- Advisor: Michiel Van de Panne

Telecom ParisTech - Eurecom Research Center
Master of Science in Computer Science
Sep. 2016 – Apr. 2018
Sophia Antipolis, France

Polytechnic University of Turin
Master of Science in Computer Engineering, full honours
Sep. 2015 – Apr. 2018
Turin, Italy

Polytechnic University of Turin
Bachelor of Science in Computer Engineering
Sep. 2012 – Jul. 2015
Turin, Italy

EXPERIENCE

Wayve Technologies
Reinforcement learning Research Engineer
May 2018 – June 2019
Cambridge, UK

- Reinforcement learning on autonomous vehicles.

University of California, Berkeley
Visiting Research Scholar at Berkeley AI Research Lab
Aug. 2017 – Feb. 2018
Berkeley, CA

- Research scholar with professor Ruzena Bajcsy working on statistical models for truth telling recognition.

Polytechnic University of Turin
Student Assistant
Mar. 2016 – Jun. 2016
Turin, Italy

- Teaching Java laboratories for the undergraduate course of Object Oriented Programming.

Polytechnic University of Turin
Technical Assistant
Sep. 2015 – Mar. 2016
Turin, Italy

- Linux and Windows maintenance duties in the Advanced Computer Science Laboratory.

PUBLICATIONS

[1] **Daniele Reda**, Tianxin Tao, and Michiel van de Panne. Learning to locomote: Understanding how environment design matters for deep reinforcement learning. In *Proc. ACM SIGGRAPH Conference on Motion, Interaction and Games*, 2020. Webpage at https://www.cs.ubc.ca/~van/papers/2020-MIG-envdesign.

[2] Jeffrey Hawke*, Richard Shen*, Corina Gurau*, Siddharth Sharma*, **Daniele Reda***, Nikolay Nikolov*, Przemyslaw Mazur*, Sean Micklethwaite*, Nicolas Griffiths*, Amar Shah*, and Alex Kendall*. Urban driving with conditional imitation learning. *International Conference on Robotics and Automation (ICRA)*, 2020. Blog post at https://wayve.ai/blog/learned-urban-driving.

[3] Alex Kendall, Jeffrey Hawke, David Janz, Przemyslaw Mazur, **Daniele Reda**, John-Mark Allen, Vinh-Dieu Lam, Alex Bewley, and Amar Shah. Learning to drive in a day. *International Conference on Robotics and Automation (ICRA)*, 2019. Blog post at https://wayve.ai/blog/l2diad.

OTHER PROJECTS

Learning to Drive in Imagination
2018

- We demonstrate a model-based algorithm trained solely in imagination drive and generalize to multiple weathers in the real-world.
- Blog post: https://wayve.ai/blog/dreaming-about-driving-imagination-rl

Teaching

CPSC 422 Intelligent Systems: Winter Term 1, 2019
IVADO/MILA/DSI Deep Learning School 5th Edition: December 2019
DSCI 572 Supervised Learning II: Winter Term 2, 2020
DSCI 563 Unsupervised Learning: Winter Term 2, 2020
DSCI 575 Advanced Machine Learning: Winter Term 2, 2020
WON THE MDS TA AWARD: Winter Term 2, 2020

Skills

Computer Languages: Python, Java, C
Human Languages: English, Italian, French, Spanish
Technologies: Pytorch, GitHub, LaTeX, ROS
Soft skills: communication and leadership skills, organizational and team working skills, 7+ years of volunteering