Daniele Reda

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Education

University of British Columbia — September 2019 – ongoing
PhD in Computer Science — Vancouver, BC, Canada

- Advisor: Michiel Van de Panne
- Topic: Reinforcement Learning, Representation Learning, Control

Telecom ParisTech - Eurecom Research Center — September 2016 – April 2018
Master of Science in Computer Science — Sophia Antipolis, France

Polytechnic University of Turin — September 2015 – April 2018
Master of Science in Computer Engineering, full honours — Turin, Italy

- Thesis: Non-invasive markers for the detection of truth telling in surveys through statistical modelling

Polytechnic University of Turin — September 2012 – July 2015
Bachelor of Science in Computer Engineering — Turin, Italy

Experience

University of British Columbia — September 2019 - ongoing
Graduate Student — Vancouver, BC, Canada

- Graduate Student Researcher
- Teaching Assistant for different courses, see Teaching section below

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

- Reinforcement learning on autonomous vehicles

University of California, Berkeley — August 2017 – February 2018
Visiting Research Scholar at Berkeley AI Research Lab — Berkeley, CA

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

Polytechnic University of Turin — September 2015 – June 2016
Teaching Assistant — Turin, Italy

- Teaching Assistant for Object Oriented Programming course

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