**M** Grenoble, France ✓ michel.aractingi@gmail.com

# Michel Aractingi

michel-aractingi.github.io in linkedin michel-aractingi

# EXPERIENCE

Ph.D. Candidate NaverLabs Europe and LAAS/CNRS Jul 2020 — present

Advisors: Philippe Soueres, Tomi Silander

Grenoble & Toulouse, France

- Wrote 3 papers in various domains related to robotics, deep reinforcement learning, quadruped locomotion, model-based control, sim2real transfer, hierarchical learning and computer vision. Directly worked on and operated 3 different quadruped robots.
- Implemented the first deep reinforcement learning based controller for Solo-12 in LAAS with open-source implementation.
- Designed and implemented a hierarchical approach to enhance the baseline locomotion of MIT's Mini-Cheetah quadruped.
- Co-supervised a group of Master interns and provided them a deep RL controller for bipedal locomotion on the Bolt robot.
- Added a vision system via a RealSense camera to the Mini-Cheetah robot, using an external computer (Nvidia Jetson Nano).

Research Engineer NaverLabs Europe Nov 2018 — Jun 2020 Advisor: Tomi Silander Grenoble, France

- Published two papers in top-tier conferences in domains related to real robot navigation, generalization in visual navigation and navigation in multi-human dynamic environments. I worked on different wheeled robots including the LoCoBot.
- Received a Best Paper Award nomination at RSS 2022 for work on visual navigation in crowded dynamic environments.

**Research Intern** Feb 2018 — Jul 2018 Advisor: Cordelia Schmid Grenoble, France

• Worked on learning manipulation skills from image input within the domains of reinforcement and imitation learning.

Implemented and improved several imitation learning algorithms, including Dagger, for tasks related to grasping and stacking.

FabLab Mastic May 2017 — Jul 2017 **Research Intern** Grenoble, France Advisor: Olivier Aycard

Implemented visual odometry and SLAM systems for a wheeled robot with lidar and RealSense camera.

#### EDUCATION

Ph.D. in Robotics and Artificial Intelligence, University of Toulouse, France	2020 — 2023
M.Sc. in Computer Science, Grenoble Alpes University, France, GPA: 15/20 (top 5%)	2016 - 2018
<b>B.Sc. in Electrical Engineering,</b> University of Balamand, Lebanon, GPA: 3.13 (top 5%)	2013 - 2016
Dean's Honor List Scholarship, 2014 and 2015	

#### SKILLS

Technologies	C++, Python, PyTorch, Unix, ROS, PyBullet, Raisim, IsaacGym
Domains	Deep reinforcement learning, imitation learning, computer vision, robotics, control
Others	Algorithms, neural networks, transformers, AI Habitat, IGibson, MIT's Cheetah Software,

# **PUBLICATIONS**

- M. Aractingi, P.A. Léziart, T. Flayols, J. Perez, T. Silander and P. Soueres. A Hierarchical Scheme for Adapting Learned Quadruped Locomotion. Under review.
- M. Aractingi, P.A. Léziart, T. Flayols, J. Perez, T. Silander and P. Soueres. Controlling the Solo12 Quadruped Robot with Deep Reinforcement Learning. Under journal review.
- G. Monaci, M. Aractingi and T. Silander. DiPCAN: Distilling privileged information for crowd-aware navigation. In RSS 2022, Best paper award nominee.
- M. Aractingi, P.A. Léziart, T. Flayols, J. Perez, T. Silander and P. Soueres. Learning to Adapt the Trotting Gait of the Solo Quadruped. preprint
- M. Aractingi, C. Dance, J. Perez and T. Silander. Improving the generalization of visual navigation policies using invariance regularization. In ICML 2019, RL4RealLife workshop

# INTERESTS

- Fluent in English and French, Arabic is my mother tongue.
- Contributed to 4electron.com as an author from 2014 to 2018. Our focus was on enhancing the online scientific content in Arabic.
- Reviewed for ICRA, IROS and Ubiquitous Robots.
- Football, Guitar and Hiking.

# REFERENCES

Contact my advisors and collaborators: Tomi Silander (Naver Labs Europe), Philippe Soueres (LAAS-CNRS), Julien Perez (Naver Labs Europe), and Thomas Flayols (LAAS-CNRS).