Georgios METHENITIS

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Work Experience

Jun. 2014 ∼ Sep. 2014

Internship, European Space Agency

- Worked in the Advanced Concepts Team on the project "Novelty Search for Soft Robotic Space Exploration".
- o Applied novel evolutionary search methods for optimizing the morphology and gaits of soft-robots in varying gravity levels (video).

Jan. 2013 ~ Mar 2014

Team Member, Dutch Nao Team

- o Developed existed C++ codebase for the Aldebaran NAO robot and the Standard Platform League.
- o Participated (placed in top-16 and 3rd) in international and open Robocup Standard Platform League competitions.

Oct. 2013 \sim Feb. 2014

Teaching Assistant, University of Amsterdam

o Assisted in teaching the course C++ programming language.

Oct. 2013 \sim Feb. 2014

Internship, VICARVISION

o Designed and developed an algorithm for estimating floor plane from monocular camera footage based on human detection samples.

Education

Feb. 2015 ∼ Feb. 2019

PhD candidate - CWI¹, Delft University of Technology

- Focusing on (electricity) markets, in which conflict of interest between strategic agents emerges in face of uncertainty (renewable
- Multi-agent systems, game-theory and learning.
- Supervised by: Prof. Han La Poutré (CWI and TU Delft) and Dr. Michael Kaisers (Researcher, CWI).

Sep. 2012 ~ Dec. 2014

MSc Artificial Intelligence - University of Amsterdam

Thesis: Evolution of Soft-Robots by Novelty Search, in collaboration with the Advanced Concepts Team in the European Space Agency (ESA), supervised by: Daniel Hennes (ESA), Dario Izzo (ESA) and Arnoud Visser (UvA).

Sep. 2006 ∼ Aug. 2012

Diploma in Electronic and Computer Engineering - Technical University of Crete

- Thesis: Player Behavior and Team Strategy for the RoboCup 3D Simulation League, supervised by: Prof. Michael G. Lagoudakis
- Developed the codebase (Java) for robot localization, locomotion, communication, strategy, and coordination.

Publications .

- Georgios Methenitis, Michael Kaisers, and Han La Poutré. "Renewable electricity trading through SLAs". In: Energy Informatics 1.1 (Nov. 8, 2018), p. 57
- 2. Georgios Methenitis, Michael Kaisers, and Han La Poutré. "SLA-Mechanisms for Electricity Trading Under Volatile Supply and Varying Criticality of Demand". In: Proceedings of the 16th Conference on Autonomous Agents and MultiAgent Systems. AAMAS '17. Sao Paulo, Brazil: International Foundation for Autonomous Agents and Multiagent Systems, 2017
- Georgios Methenitis, Michael Kaisers, and Han La Poutré. "Incentivizing Intelligent Customer Behavior in Smart-Grids: A Risk-Sharing Tariff & Optimal Strategies". In: Proceedings of the 25th International Joint Conference on Artificial Intelligence, IJCAI. AAAI Press. 2016
- 4. Georgios Methenitis, Michael Kaisers, and Han La Poutre. "A multi-scale energy demand model suggests sharing market risks with intelligent energy cooperatives". In: Smart Grid Technologies - Asia (ISGT ASIA), 2015 IEEE. 2015
- Georgios Methenitis, Daniel Hennes, Dario Izzo, and Arnoud Visser. "Novelty Search for Soft Robotic Space Exploration". In: Proceedings of the 2015 Annual Conference on Genetic and Evolutionary Computation. GECCO '15. Madrid, Spain: ACM, 2015
- 6. Georgios Methenitis, Patrick M de Kok, Sander Nugteren, and Arnoud Visser. "Orientation finding using a grid based visual compass". In: BNAIC, 2013

Research Interests.

- o Multi-Agent Systems (Learning/Cooperation/Competition)
- o Game-Theory
- o Machine Learning
- o Evolutionary Algorithms

Technical Skills

SOFTWARE

PLATFORMS

Sony AIBO.

Python (Tensorflow), C++ (Boost, GNU/Linux (Arch, Debian), MS OpenCV, STL, PCL, Qt, CMake), Windows, MacOS Java, C#, C, HTML/CSS

Eclipse, NetBeans, Qt Creator, Matlab, LATEX

Aldebaran NAO, Webots, Spark, VoxCad

PROGRAMMING

 $^{^{1}}$ CWI (Centrum Wiskunde & Informatica) is the national research institute for mathematics and computer science in the Netherlands.

^{*}References are available upon request