Vaios Papaspyros

PhDc in Machine Learning & Robotics @ EPFL

General Information

Nationality: Greek
Birthday: 28/04/1994

Address

EPFL STI
SCI-STI-FMO1
ME B3 30
(Bâtiment ME)
Station 9
CH-1015 Lausanne
Switzerland

Telephone

+41 78 860 11 13
(Mobile)

+41 21 693 56 80
(Work)

Mail

(Academic)
vaios.papaspyros@
epfl.ch

(Personal)
b.papaspyros@
gmail.com

Web & Git

Personal Website
Twitter
LinkedIn
Github
Bitbucket

OS Preference

Linux ★★★★★
MacOS ★★★★★
Windows ★★★☆☆

Languages

Greek ★★★★★
English ★★★★☆
French ★★☆☆☆

Experience

06/18 - *Now* **Doctoral Assistant** — EPFL, Lausanne, Switzerland

Team: Mobots @ Francesco Mondada Group (FMO1).
Research Topic: Self-Adaptive Mixed Societies of Animals and Robots.
Thesis director: Francesco Mondada.
Funding: Swiss National Science Formation (SNF).

03/18 - 05/18 **Research Intern** — EPFL, Lausanne, Switzerland

Team: Mobots @ Laboratoire de Systèmes Robotiques (LSRO).
Research Topic: Self-Adaptive Mixed Societies of Animals and Robots.
Supervisors: Frank Bonnet, Francesco Mondada.

06/17 - 11/17 **Research Engineer** — MEAD, Univ. of Patras, Patras, Greece

Team: EuroSWARM team @ Applied Mechanics Lab.
Research Topic: Unmanned Heterogeneous Swarm of Sensor Platforms.
Funding: European Defense Agency (EDA) “EuroSWARM” Project.

05/16 - 10/16 **Research Intern** — Inria Nancy Grand-Est, Nancy, France

Team: LARSEN/Resibots.
Internship Title: Intelligent Trial & Error with the iCub humanoid robot.
Research Topic: Robot damage recovery with safety constraints.
Supervisor: Jean-Baptiste Mouret.
Funding: European Research Council (ERC) “ResiBots” Project.

Education

06/18 - *Now* **Doctor of Philosophy - PhD Candidate** — EPFL, Lausanne, Switzerland
Robotics, Control, and Intelligent Systems.

09/12 - 11/17 **M.Eng in Computer Engineering & Science** — Univ. of Patras, Patras, Greece
GPA: 7.35 / 10
Diploma Thesis Subject: Safety-Aware Intelligent Trial-and-Error for Robot Damage Recovery.
Grade: 10/10.
Supervisors: Ioannis Hatzilygeroudis, Jean-Baptiste Mouret.
Related Publications: “Safety-Aware Robot Damage Recovery Using Constrained Bayesian Optimization and Simulated Priors”.

09/10 - 06/12 **High School** — Costeas-Geitonas School, Athens, Greece
GPA: 19.2 / 20

Teaching

• Winter Semester

02/21 - 06/21 **Basics of Mobile Robotics** EPFL
2h / week - 1st year Master of Robotics

02/20 - 06/20 **Basics of Mobile Robotics** EPFL
2h / week - 1st year Master of Robotics

• Spring Semester

02/21 - 06/21 **Robotics practicals | Robot Operating System (ROS) basics** EPFL
4h / week - 1st year Master of Robotics

02/20 - 06/20 **Robotics practicals | Robot Operating System (ROS) basics** EPFL
4h / week - 1st year Master of Robotics

02/19 - 06/19 **Robotics practicals | Robot Operating System (ROS) basics** EPFL
4h / week - 1st year Master of Robotics

Publications

• Journals

Sep 2020 *A data-driven method for reconstructing and modelling social interactions in moving animal groups*, Escobedo R, Lecheval V, **Papaspyros V**, Bonnet F, Mondada F, Sire C, Theraulaz G. Philosophical Transactions of the Royal Society B

Aug 2019 *Bidirectional interactions facilitate the integration of a robot into a shoal of zebrafish Danio rerio*, **Papaspyros V**, Bonnet F, Collignon B, Mondada F. PLoS One

• Conferences

May 2021 *Exploring a Handwriting Programming Language for Educational Robots*, El-Hamamsy L., **Papaspyros V.**, Kangur T., Mathex L., Giang C., Skweres M., Bruno B., Mondada F. Proceedings of the 12th International Conference on Robotics in Education

• Workshops

Dec 2016 *Safety-aware robot damage recovery using constrained bayesian optimization and simulated priors*, **Papaspyros V**, Chatzilygeroudis K, Vassiliades V, Mouret JB. Proceedings of the International Workshop on "Bayesian Optimization" at NIPS 2016

Reviewer

IROS International Conference on Intelligent Robots and Systems. 2020, 2021

IISA 10th International Conference on Information, Intelligence, Systems and Applications. 2019

BayesOpt International workshop on bayesian optimization of the Neural Information Processing Systems (NIPS) Conference. 2017

Open-source project contributions

C/C++ **Co-author to robot_dart**
robot_dart is a flexible and generic C++11 wrapper for DART and is suitable for evolutionary computation.

C/C++ **Contributor to limbo**
limbo is a highly templated C++11 Bayesian optimization framework.

Honors & Awards

05/2018 **SwissZebra Conference**
3rd prize for best poster (100 CHF).

Programming skills

Advanced **C++(11/17), Boost, Eigen, Python, LaTeX, Robot Operating System (ROS), OpenCV, C, Matlab/Octave, bash scripting, Policy-based design**

Intermediate **OpenMP, CUDA, OpenGL, Java, MySQL & Sqlite, HTML 5, CSS, PHP, Javascript**

Interests

- Machine Learning & AI
- Robotics
- Programming
- Basketball & Music

Vaios Papaspyros