



# Vaios Papaspyros

Robotics & Machine Learning Engineer

## Experience

03/18 - Now **Research Intern** [École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland](#)

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

11/17 - 02/18 **Robotics Software Engineer** [Myrmex Inc., Ilioupoli, Greece](#)

06/17 - 11/17 **Research Engineer** [MEAD, Univ. of Patras, Patras, Greece](#)

**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.  
**Related Publications:** "Safety-Aware Robot Damage Recovery Using Constrained Bayesian Optimization and Simulated Priors".

## Address

Lausanne Area  
Canton de Vaud,  
Switzerland

## Telephone

+30 698 2253076  
(Greek)

## Mail

[b.papaspyros@gmail.com](mailto:b.papaspyros@gmail.com)  
[vaios.papaspyros@epfl.ch](mailto:vaios.papaspyros@epfl.ch)

## Web & Git

Personal Website   
Twitter   
LinkedIn   
Github   
Bitbucket

## OS Preference

Linux ★★★★★  
Windows ★★★★★  
MacOS ★★★★★

## Languages

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

## Education

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.

09/10 - 06/12 **High School** [Costeas-Geitonas School, Athens, Greece](#)  
**GPA:** 19.2 / 20

2013 - Now **Online Courses** [Coursera, MIT and Stanford open courseware](#)

I have attended over 10 courses covering a wide range of topics such as Machine Learning, Software Engineering, Android Development, Parallel Programming, Linear Algebra, Computer Architecture, Data Structures, Digital Signal Processing, etc.

# Publications

## • Peer-Reviewed Workshops

Papaspyros, V., Chatzilygeroudis, K., Vassiliades, V. and Mouret, J.B., 2016.

### **Safety-Aware Robot Damage Recovery Using Constrained Bayesian Optimization and Simulated Priors**

*BayesOpt 2016: Proceedings of the International Workshop on "Bayesian Optimization" at NIPS 2016* | **Supplementary Video**

# Reviews

## **2017 - NIPS Workshop - BayesOpt 2017**

*Reviewer for the BayesOpt 2017 Workshop of the Neural Information Processing Systems (NIPS) Conference.*

# Programming Assignments & Experience

AI,  
Machine Learning,  
& Robotics

### **Interested in advancing in this field**

- Research intern at Inria - Intelligent Trial & Error with the iCub humanoid robot.
- Research intern at EPFL - Self-Adaptive Mixed Societies of Animals and Robots.

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.

C/C++

**Experienced with: Boost, LEDA, OpenMP, CUDA, OpenCL, OpenGL, data structures, posix threads, TCP/IP protocols.**

Python

### **Experienced with: matplotlib, numpy and the waf build system.**

Multiple assignments using python for data analysis or algorithmic design (e.g. Aho-Corasick).

Matlab/Octave

### **Plenty of experience with data analysis using Matlab.**

University assignments for: Scientific Computation, Digital Telecommunications (quantizer, huffman code, PCM, FSK, PSK implementations) courses. Also, assignments for the online course "Machine Learning" (Coursera).

Java/Android

### **Java and JavaFX, multiple Android data structure APIs.**

Multiple university assignments requiring the use of Java and JavaF and Android development. Also, a few personal Android projects.

Databases

### **MySQL, sqlite, JDBC**

University assignments: Database design, implementation & deployment.

Web

### **HTML, CSS, PHP, Javascript**

Examples of assignments: Simple mailing list manager (with a simple interface) using the campaign monitor php API, courrier-like complete system.

## Competitions

02/2013

**IEEEExtreme9.0**

IEEE

Team "Tokyooo" | Ranked top 25% worldwide.

## Certifications

**English Language**

Cambridge

Proficiency Level (C2)

**French Language**

International Centre for French Studies

DELF (B2)

**European Computer Driving Licence (ECDL)**

ECDL Foundation

**International Certificate in IT Skills**

Cambridge

## Summary of skills

Advanced

**C/C++(11), Python, Boost, Eigen, Robot Operating System (ROS), Matlab/Octave,  $\text{\LaTeX}$ , bash scripting, Object Oriented Design & Programming, Policy-based design**

Intermediate

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

## Summary of language skills

Greek

**Native**

English

**Fluent - Full Professional working proficiency**

French

**Moderate - Limited working proficiency**

## Interests

- Machine Learning
- Programming
- Basketball
- Artificial Intelligence
- Robotics
- Music/Guitar

*Vaios Papaspyros*