

Alexis Jacq

Ph.D. Student in Cognitive Robotics

🌐 alexis-jacq.github.io

✉ alexisjacq@google.com

🐙 github.com/alexis-jacq

Summary

My PhD thesis investigates robots strategies aiming at improving children learning in educative Human-Agent Interactions. While this topic is constrained by real-world experimentation, my background is theoretical and my interest focuses on mathematical models of learning and adaptive behaviours.

Education

Ecole Normal Supérieure (Cachan)

Master (2nd year) of mathematics, spe Mathematics for Vision and Learning

Cachan, France

2013-2014

Pierre & Marie Curie University

Master (1st year) of bio-informatics (ranked 1st)

Paris, France

2012-2013

Joseph Fourier University

Bachelor of mathematics (ranked 1st)

Grenoble, France

2009-2012

Master Thesis.....

Reinforcement Learning Models for Information Seeking in Monkeys

Supervised by Pierre-Yves Oudeyres & Manuel Lopes (Inria, Bordeaux)

Inria Bordeaux

2014

Bachelor Thesis.....

Variational Data Assimilation for an Ice Cap Model

Supervised by Maelle Nodet (Inria, Grenoble)

Inria Grenoble

2012

Ph.D.

Title: Mutual Understanding In Educational Human-Agent Collaborations

EPFL & IST

Supervised by Pierre Dillenbourg (EPFL, Lausanne) & Ana Paiva (IST Lisbon)

2015 - now

🔑 **Keywords:** human-robot interaction, multi-agent learning, inverse-reinforcement learning.

Summer schools.....

Prairie Artificial Intelligence Summer School (Paiss) 2018

Grenoble, France

Data Science Summer School (DS3) 2018

Palaiseau, France

Social HRI Summer School 2017

Vila Milfontes, Portugal

Followed courses.....

EPFL: *Intelligent Agents* (Boi Faltings), *Unsupervised and Reinforcement Learning* (Marc-Oliver Gewaltig), *Digital education & Learning analytics* (Pierre Dillenbourg)

IST: *Advanced topics in Artificial Intelligence* (Francisco Melo & Manuel Lopes), *Affective Computing* (Ana Paiva & Joao Dias)

Google Internship

Software developer intern at Google Brain

Paris

Supervised by Olivier Pietquin

2019 - now

- **Keywords:** Reinforcement learning, Multi-agent learning, Game theory, Deep learning.

[Accepted publications](#).....

Learning from a Learner

A. Jacq, M. Gueist, A. Paiva, O. Pietquin

ICML 2019

[Submitted publications \(under review process\)](#).....

Foolproof Cooperative Learning

A. Jacq, J. Perrolat, M. Gueist, O. Pietquin

AAAI 2020

Selected Publications

Learning from a Learner

A. Jacq, M. Gueist, A. Paiva, O. Pietquin

ICML 2019

Sensitivity To Perceived Mutual Understanding In Human-Robot Collaborations

A. Jacq, J. Magnan, M. Ferreira, P. Dillenbourg, A. Paiva

AAMAS 2018

Building successful long child-robot interactions in a learning context

A. Jacq, S. Lemaignan, F. Garcia, P. Dillenbourg, A. Paiva

HRI 2016

From real-time attention assessment to with-me-ness in human-robot interaction

S. Lemaignan, F. Garcia, A. Jacq, P. Dillenbourg

(Best paper award) HRI 2016

Side-projects

[Open Python projects](#).....

Neural Transfer of Artistic Style

pytorch.org/tutorials/advanced/neural_style_tutorial.html

Sketch-RNN

github.com/alexis-jacq/Pytorch-Sketch-RNN

Learning with Opponent-Learning Awareness

github.com/alexis-jacq/LOLA_DiCE

Teaching

[EPFL](#).....

C programming

Fall 2017

Analyse IV

Spring 2016

Analyse I

Spring 2015

Introduction to Visual Computing

(Best assistant award) Spring 2015

Languages

- **Typed:** Python (mother tongue), C/C++, R, Java, HTML/CSS, Javascript
- **Spoken:** Fluent in French and English, A1 level in Portuguese

Other interests

- **Sports:** surfing, dance improvisation, running
- **Arts:** painting (oil/watercolour), sculpting (clay/wood), writing (short-novels/poetry)