Guillaume de Chambrier

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Profile

With several independent projects accomplished, I am an expert in developing and applying machine learning techniques to robot systems and I possess meticulous strong analytical skills.

Education

Ph.D in Manufacturing Systems & Robotics — **École polytechnique fédérale de Lausanne, Switzerland**
- Thesis: Learning Search Strategies from Human Demonstrations — *2012 - 31.08.2016*
  supervisor: Prof. Aude Billard

MSc in Informatics, First class with Honours — **University of Edinburgh, UK**
- Thesis: Building and Controlling a Hexapod Robot — *2006 - 2011*
  supervisor: Dr. Michael Herrmann

Erasmus Exchange, Bachelor — **Universität des Saarlandes, Germany**
- Project: Ray tracing competition (computer vision) — *2008 - 2009*

Experience

Teaching Assistant — **École polytechnique fédérale de Lausanne**
- Course: Applied Machine Learning (MSc) — *2013-2016*
- Course: Advanced Machine Learning (MSc & Ph.D)

European Project — **École polytechnique fédérale de Lausanne**
- Flexible Skill and Intuitive Robot Tasking — *2012-2013*

Supervision — **École polytechnique fédérale de Lausanne**
- Akshara Rai (Msc student) — *2013*

Technical Skills

Programming: C/C++, Python, Java, MATLAB

Expertise: Robotics, Reinforcement Learning, Non-parametric Bayesian inference, Machine learning & Computer Vision

Languages

English, French (bilingual)

Awards and Certification

Google Prize: Best Phase 1 Project in Master of Informatics Programme (2010)

Publication

de Chambrier G., Billard A.: Learning search behaviour from humans. International Conference on Robotics and Biomimetics, Dec. 2013

Rai A.,de Chambrier G., Billard A.: Learning from Failed Demonstrations in Unreliable Systems. International Conference on Humanoid Robots, Oct. 2014

de Chambrier G., Billard A.: Learning search policies from humans in a partially observable context. Journal of Robotics and Biomimetics, 2014

de Chambrier G., Billard A.: Fitted Policy Iteration for a POMDP Peg-In-Hole search task. Journal of Robotics and Autonomous Systems, 2016

de Chambrier G., Billard A.: Non-parametric Bayesian State Space Estimator for Negative Information. Frontiers in Robotics and AI, 2016 *(under review)*