



PRLT: a Wiki Documentation

Alessandro Lazaric





Goals

Structure and Modules

Scenarios

- Project: experiments
- Project: environments
- Project: algorithms

Technical Modules (TM)

Introductory Modules (IM)

Theoretical Modules (ThM)

Example Modules (EM)

FAQ Modules (FM)

Development Modules (DM)



The PRLT-Wiki must provide an entry point for:

- project and master students who need to get acquainted with:
 - the structure
 - the technical issues (installation, cvs management, ...)
 - the development of new features
- researchers who want to understand the solutions and the algorithms developed by the group
- other people who just want to have an idea of what PRLT is and to watch to some demos



Entry points:

- research
- development
- demos

Units: a unit contains a set of modules

Modules:

- Technical Modules (TM)
- Introductory Modules (IM)
- Theoretical Modules (ThM)
- Example Modules (EM)
- FAQ Modules (FM)
- Development and HowTo Modules (DM)

Doxygen



This unit should contain:

- I1: Introduction to environments
- M1: XML Structure Description
- D1: HowTo Read a XML document with XercesC
- M2: Logging
- M3: Graph Generation
- D2: Gnuplot
- M4: Designing Interface to external environments and frameworks
- I2: Introduction to the critic
- M5: Reward Managers



This unit shares all the modules of the previous one, plus:

- M6: Single agent environments
- M7: Multi agent environments
- M8: Turn environments



This unit should contain the modules of the previous one, plus:

- M9: Simple Single Agent Algorithm
- E1: Q-Learning
- M10: Simple Multi Agent Algorithm
- E2: CoLF
- M11: Handcoded Agent
- M12: Centralized Multi Agent Algorithm
- M13: Exploration
- Th1: Exploration-Exploitation Dilemma



M1: XML Structure Description

M2: Logging

M3: Graph Generation

M4: Designing Interface to external environments and frameworks

M5: Reward Managers

M6: Single agent environments

M7: Multi agent environments

M8: Turn environments

M9: Simple Single Agent Algorithm



M10: Simple Multi Agent Algorithm

M11: Handcoded Agent

M12: Centralized Multi Agent Algorithm

M13: Exploration

M14: Tabular Data Structure



- I1: Introduction to environments
- I2: Introduction to critic
- I3: Introduction to architecture
- I4: Introduction to learning agent



Th1: Exploration-Exploitation Dilemma

Th2: Q-Learning

Th3: Linear Function Approximation

Th4: LEAP

Th5: SMILe

Th6: CoLF/CK

Th7: Bound

Th8: RL Coalition Formation



E1: Q-Learning

E2: CoLF



F1: ?



- D1: HowTo Read a XML document with XercesC
- D2: Gnuplot
- D3: CVS / Savane
- D4: Debugging
- D5: Doxygen
- D6: Gnuplot
- D7: C++ Coding Standards, astyle
- D8: Valgrind
- D9: Cachegrind
- D10: Octave
- D11: IDE
- D12: Distro Linux / gcc / libs
- D13: Info about cluster