Ryan Pégoud

EDUCATION

Computational Statistics and Machine Learning MSc.

UCL, London, England 09/2024 – 09/2025

(Set to start on the 23rd of September 2024.)

Diplôme Grandes Écoles

EPF - ECOLE D'INGÉNIEURS, MONTPELLIER, FRANCE 03/2019 - 07/2023

Graduated with First-Class Honours (Mention Très Bien)

• Ranked 9/149 (6

MSc Average: 16.92 (84.6%)BSc Average: 13.47 (67.4%)

French National Baccalauréat, Scientific Section

Lycée Nevers, Montpellier, France 09/2015 - 07/2018

Obtained with **High Honours** (Mention Bien)

ACADEMIC APPOINTMENTS

Lecturer (Professeur Vacataire)

 $\ensuremath{\mathsf{EPF}}$ - Ecole d'ingénieurs, Montpellier, France

09/2023 - 01/2024

Course: Natural Language Processing (NLP)

Responsibilities: Module Leader, Module Lecturer, Exam-Setting for a class of 25 MSc students

Professional Experience

Data Scientist (Master thesis)

BMW, Munich, Germany 02/2023 - 07/2023

Master Thesis Title: "Time Series Based Anomaly Detection For Fleet Connectivity" Grade: 20/20 (100%)

Data Scientist (Remote Student Job)

CEWE STIFTUNG & Co. KGAA, Fabrègues, France 06/2022 - 07/2022

Topic: Creation of an aspect-based sentiment analysis pipeline for multilingual customer feedback analysis

Data Scientist (Bachelor thesis)

CEWE STIFTUNG & Co. KGAA, OLDENBURG, GERMANY 07/2021 - 01/2022

Bachelor Thesis Title: "Multilingual Text Classification using Transformers" Grade: 17.67/20~(88.4%)

Publications

Workshop Publications

 Ryan Pégoud, Thibault Lahire. "Idea: Better Gradient Steps for Deep On-Policy Reinforcement Learning." Aligning Reinforcement Learning Experimentalists and Theorists Workshop at the International Conference on Machine Learning (ICML), 2024. Vienna, Austria. Ryan Pégoud Curriculum Vitæ

PEER-REVIEWED ARTICLES

- Rainbow: The Colorful Evolution of Deep Q-Networks Published on July 13, 2024 · In Towards Data Science
- A Practical Guide to Proximal Policy Optimization in JAX Published on May 1, 2024 · In Towards Data Science
- A Gentle Introduction to Deep Reinforcement Learning in JAX Published on Nov 21, 2023 · In Towards Data Science
- Implementing a Transformer Encoder from Scratch with JAX and Haiku Published on Nov 7, 2023 · In Towards Data Science (Editor's picks)
- Vectorize and Parallelize RL Environments with JAX: Q-learning at the Speed of Light Published on Oct 15, 2023 · In Towards Data Science
- Temporal-Difference Learning and the importance of exploration: An illustrated guide Published on Sep 23, 2023 · In Towards Data Science (Editor's picks, Data Science and ML: Must-Reads)

OPEN-SOURCE CONTRIBUTIONS

Syllabus: Synchronized Curriculum Learning for RL Agents

- Implementation of learning curricula over co-players in multiagent games:
 - Self-Play, Tesauro, 1995
 - Fictitious Self-Play, Heinrich et al., 2015
 - Prioritized Fictitious self-play, Vinyals et al., 2019

STOIX: DISTRIBUTED SINGLE-AGENT REINFORCEMENT LEARNING END-TO-END IN JAX

- Implementation of Rainbow DQN (Hessel et al. 2017).
- Creation of a documentation website.

LANGUAGES

- French: Native
- English: Fluent (Toefl: 107/120, Toeic: 975/990)
- German: Intermediate (two 6-month internships in Munich and Oldenburg)
- Spanish: Intermediate (6 years, throughout middle and high school)