Rousslan Fernand Julien Dossa

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EXPERIENCE

Third Year Doctoral Student — April 2020 – Present

Kobe University — *Graduate School of System Informatics, Japan*

- Publication of *Toward Human Cognition-inspired High-Level Decision Making For Hierarchical Reinforcement Learning Agents*, in IEICE Complex Communication Sciences (CCS), vol. 121, no. 253, pp. 61-66, 2021
- Collaboration in *CleanRL: High-quality Single-file Implementations of Deep Reinforcement Learning Algorithms*, ArXiv Preprint, vol. abs/2111.08819, 2021
- Publication of *An Empirical Investigation of Early Stopping Optimizations in Proximal Policy Optimization*, in IEEE Access, vol. 9, pp. 117981-117992, 2021

Master Student — April 2018 – March 2020

Kobe University — *Graduate School of System Informatics, Japan*

- Publication of *Hybrid of Reinforcement and Imitation Learning for Human-Like Agents*, in IEICE Transactions on Information and Systems, vol. E103.D, no. 9, pp. 1960-1970, 2020
- Presenting research results at local and international conferences, publications in academic journals
- Awarded a Japanese Government Scholarship (Monbukagakushou) from 2017 to 2023

Graduate Research Assistant — March 2019 – Present

Kobe University — *Graduate School of System Informatics, Japan*

- Surveying, re-implementing and leading discussion sessions of trending deep reinforcement learning papers
- Deep learning laboratory's server infrastructure management (Uehara Lab., Kobe University)
- Cross-field collaboration and discussions with other machine learning student researchers
- Peer-review of papers and articles submitted to academic journals and conferences

EDUCATION

Graduate School of System Informatics — Kobe University, Japan

Master's Degree in Computational Science — *April 2018 – March 2020*

National School of Applied Economics and Management (ENEAM) — Cotonou, Republic of Benin

Bachelor Degree in Software and System Engineering, Valedictorian — *Sept. 2012 – March 2016*

PROJECTS

Contributing to the CleanRL Library | *Python, Torch, Tensorflow 1.15* — October 2019 – Present

- Re-implementation, discussions and extensive empirical studies of deep reinforcement learning algorithms

GymTorcs (Project Page) | *Python, C, C++* — April 2018 – March 2020

- Extension of an existing custom OpenAI Gym environment and the underlying *Torcs Racing Car Simulator*   g
- Added support for systematic, parallelized and faster training with multiple simulator instances
- Added support for data collection of human players for imitation learning experiments

GymCarla | *Python, Unreal Engine 4, Linux* — April 2019 – Dec. 2019

- OpenAI Gym integration prototype for the Carla Autonomous Driving simulator for reinforcement learning research

GPU Server Status Tool | *Javascript (Node.js server), AngularJS, Linux, LAN Webapp* — March 2019

- Monitoring program for NVIDIA GPU servers status for easier server allocation and experiment distribution

TECHNICAL SKILLS AND OTHERS

Languages: Python, C/C++, Javascript, Java, SQL (MySQL, Hibernate OOM), HTML/CSS, PHP
Frameworks: Pytorch, Tensorflow 1.15, Node.js, MPI, AngularJS, Spring(Java)
Developer Tools: Git, Jupyter, AWS, Docker, Google Collab, VS Code, Eclipse
Libraries: Dreamer-v2, CleanRL, Stable Baselines 3, OpenAI Baselines and SpinningUp, Google Dopamine
Communication: English (Academic), French (Native), Japanese (Intermediate), Russian (Heritage speaker)
Additional interests: Neuroscience, Evolutionary algorithms and neuro-evolution, Psychology, Game Theory, Optimization, Robotics, Cybernetics, Video games and simulations