CYPRIEN RUFFINO

PhD Student in Machine Learning

EDUCATION

Currenly enrolled in: PhD in Machine Learning

Master's Degree in Software Engineering

2015-2017 Ranked 1st/43

♥ Université d'Orléans

Bachelor's Degree in Computer Science

EMPLOYMENT

PhD thesis: Deep Generative Modeling for Structured Data Generation

Laboratoire d'Informatique, de Traitement de l'Information et du Signal (LITIS, INSA de Rouen)

October 2017-Now

Supervisors: Pr. G. Gasso, R. Hérault

- Conditioned data generation with Generative Adversarial Networks
- Multi-obective training of Generative Adversarial Nets
- Integration of domain-specific constraints
- Applications to scientific data, most notably geostatistical data

Research Internship: Machine Learning Research Intern Laboratoire d'Informatique, de Traitement de l'Information et du Signal (LITIS, Normandie University)

April 2017 - October 2017

Supervisor: Pr. T. Paquet

- Deep Learning for offline handwritten text recognition on Android devices with Convolutional LSTMs
- Development of a prototype recognition system with TensorFlow and TensorFlow Lite for Android
- Industrial partnership with Hamelin SAS for the Oxford brand

Internship: Research assistant

Laboratoire d'Informatique Fondamentale d'Orléans (University of Orléans)

April-June 2015

Supervisor: Pr. N. Ollinger

 Development of a cross-platform application for the visualisation of the SMART (Small Minimal Aperiodic Reversible Turing machine) machine for researchers, with OpenFL

FEATURED PUBLICATIONS

- 1. Pixel-wise Conditioned Generative Adversarial Networks for Image Synthesis and Completion, **Cyprien Ruffino**, Romain Hérault, Eric Laloy, Gilles Gasso *In Neurocomputing*, 2020
- 2. Gradient-based deterministic inversion of geophysical data with generative adversarial networks: Is it feasible? Eric Laloy, Niklas Linde, **Cyprien Ruffino**, Romain Hérault, Gilles Gasso, Diedrik Jacques *In Computers and Geosciences*, 2019

SKILLS

English European Level C2
French Native speaker

Python

Java C/C++ ••••

TensorFlow Keras

Invtor

LinuxGitSLURMJupyterJetBrains IDEsSQLScikit-learnSciPyMatplotlibAndroid SDK

SOME PROJECTS

CTCModel

Easy-to-use Connectionnist Temporal Classification in Keras

PyChip8

A scriptable CHIP-8 emulator written in pure Python

TEACHINGS

Introduction to programming

2018-2020

♀ INSA de Rouen

Introduction to algorithmics and programming in Pascal

Applied statistics for data science

2018-2020

♀ INSA de Rouen

Statistics, data analysis and visualisation, regressions, dimensionality reduction and testing, with SciPy/Matplotlib.

AND ALSO...

- PhD students representative, voting member of the LITIS lab council, 2018–2020
- President of the IT student's association, 2015–2016
- Sysadmin of several of the LITIS GPU computation servers
- ArchLinux/Manjaro > Ubuntu
- Bass player, Esperanto speaker, member of the French Association of Lockpickers