

Work Experience

Data Scientist, IFREMER - France,

01/2021

- Machine learning applied to ocean data in a cloud environment for European project [Blue-Cloud](#): in the group of Kevin Balem, Guillaume Maze, Andrea Garcia Juan (Ifremer LOPS) and Massimiliano Drudi (CMCC)
- Temperature and salinity profiles prediction using deep learning on Argo data in the group of Etienne Pauthenet, Anne-Marie Treguier and Kevin Balem (Ifremer LOPS)
Pauthenet, E. et al.: Four-dimensional temperature, salinity and mixed-layer depth in the Gulf Stream, reconstructed from remote-sensing and in situ observations with neural networks, Ocean Sci., 18, 1221–1244, <https://doi.org/10.5194/os-18-1221-2022>, 2022.
- Bioacoustics: automatic detection and extraction of biomass in acoustic data
Work with Muriel Dunn (Memorial University of Newfoundland)
Following OceanHackweek work supervised by Nick Mortimer (CSIRO), Wu-Jung Lee, and Emilio Mayorga (UW)

Data Scientist, Revenue management, Air-France KLM, Paris - France

02/2020-07/2020

- Building tools to support the pricing and the booking of commercial flights used at Air-France KLM and many other airlines (Delta, Alitalia, China Airline: more than 8000 users), decision support.
- Co-product owner of the project on private fares, working with Infare.

Deep learning Research Intern

05/2019-10/2019

Laboratoire des Signaux Systèmes Intégrés, the University Of Quebec In Trois-Rivières - Canada,

- Research and implementation on CNN in the frequency domain
- Parallel programming using a polyhedral tool
- Parallelization on GPU and CPU of genes detection in DNA using signal processing: 600x faster: openMP, profiling
Massicotte, et al. "Low Complexity Frequency Monitoring Filter for Fast Exon Prediction Sequence Analysis", IEEE Global Conf. on Signal and Information Processing (GlobalSIP), Ottawa, Nov. 2019.
- Collaborated on other research projects involving artificial intelligence (EEG/EMG movement recognition, speaker distortion)

Academic Work

Adversarial MCTS at Etis lab - CNRS UMR8051 - France,

10/2018-03/2019

- Combined an adversarial learning model with a Monte Carlo Tree Search algorithm: deep learning, computer vision
- Demonstrated it can be as performant as using the ground truth for Puzzle solving
- Communicated my work to MM. Paumard for her PhD

Emotional rating of events based on tweets at University of Cergy-Pontoise - France,

01/2018-06/2018

- Event detection (concerts, football...) using Twitter live stream: data integration, cleaning, clustering
- Emotional rating of the tweets to rate the events: Natural language processing, emotional rating

Education

Master of Science: Artificial Intelligence and Big Data - University Of Cergy-Pontoise - France

09/2017-09/2019

Exchange Semester: Artificial Intelligence and Big Data - University Of Jyväskylä - Finland

01/2018-06/2018

Bachelor of Science: Computer science (equivalent) - University Of Cergy-Pontoise - France

09/2014-09/2017

Leadership

Entrepreneur - Customer fidelity mobile app with two partners: Business plan, market study, pitch

08/2017-06/2018

General secretary Junior enterprise - Customer relationship, project management

09/2016-12/2017

Skills

General	Programming	Tools
<ul style="list-style-type: none"> Machine learning/Deep learning Parallel computing/cloud Data Mining Project management English: Fluent French: Fluent 	<ul style="list-style-type: none"> Python SQL C/C++, Java JS/HTML/PHP/CSS Git 	<ul style="list-style-type: none"> Linux/Windows Apache Spark Keras/Tensorflow Tableau MPI/OpenMP HPC/Cloud