

Adrien Fois

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Education

PhD in Computer Science

LABORATOIRE LORRAIN DE RECHERCHE EN INFORMATIQUE ET SES APPLICATIONS, UNIVERSITY OF LORRAINE

Nancy, France

2022

Master in Systemic and Synthetic Biology

UNIVERSITY PARIS SACLAY

Evry, France

2017

Master in Embedded Systems and Microsystems

UNIVERSITY PAUL SABATIER

Toulouse, France

2016

Bachelor in Electrical Engineering and Information Technology

UNIVERSITY OF APPLIED SCIENCES

Offenburg, Germany

2015

Bachelor in Computer Science

UNIVERSITY OF APPLIED SCIENCES

Neuchâtel, Switzerland

2014

Bachelor in Electrical and Electronic Engineering

UNIVERSITY OF APPLIED SCIENCES

Haguenau, France

2014

Scientific publications

Preprints :

- Adrien Fois and Bernard Girau. «Enhanced representation learning with latency coding in sparsely spiking neural networks». In Frontiers in Computational Neuroscience. 2023 (In submission)
- Adrien Fois and Bernard Girau. «Self-Organizing Temporally Coded Representation Learning». In International Conference on Artificial Neural Networks (ICANN). 2023 (In submission)

Publications :

- Adrien Fois, Horacio Rostro-Gonzalez and Bernard Girau. «Unsupervised learning of visual representations using delay-weight spike-timing-dependent plasticity». In International Joint Conference on Neural Networks (IJCNN). 2022
- Adrien Fois and Bernard Girau. «A Spiking Neural Architecture for Vector Quantization and Clustering». In International Conference on Neural Information Processing (ICONIP). 2020
- Jan Tekülve, Adrien Fois, Yulia Sandamirskaya, and Gregor Schöner. «Autonomous Sequence Generation for a Neural Dynamic Robot : Scene Perception, Serial Order, and Object-Oriented Movement». In Frontiers in Neurorobotics. 2019
- Yann Bernard, Emeline Buoy, Adrien Fois, and Bernard Girau. « NP-SOM : Network Programmable Self-Organizing Maps ». In International Conference on Tools with Artificial Intelligence (ICTAI). 2018

Teaching

C language

LECTURES/EXERCICES - 1ST YEAR IN COMPUTER SCIENCE

- Functions, Arrays, Pointers, Structure and Unions, Dynamic Memory Allocation, Scope

2022

Télécom Nancy

C language and data structures

EXERCICES - 1ST YEAR IN COMPUTER SCIENCE

- Linked list, Hashing, Binary Tree, Balanced Binary Tree

2022

Télécom Nancy

Assembly language

EXERCICES - 1ST YEAR IN COMPUTER SCIENCE

- Registers, Instructions, Conditions, Loops, Arrays, Recursion

2022

Télécom Nancy

Mathematics for Computer Science

EXERCICES - 1ST YEAR IN COMPUTER SCIENCE

- Propositional logic : Syntax, Semantic, Clausal Form, Demonstration, Resolution

2021

Télécom Nancy

Unix Shell

EXERCICES - 1ST YEAR IN COMPUTER SCIENCE

- Navigation, File Permission, Pipes and Filters, Regex

2021

Télécom Nancy

Computational Neuroscience

LECTURES/EXERCICES - 2ND YEAR IN COGNITIVE SCIENCE

- Biophysical models for Neurons and Synaptic Plasticity, Python Programming

2020

*Institut des sciences du Digital,
Management et Cognition*

JavaScript language

LECTURES/EXERCICES - 2ND YEAR IN COMPUTER SCIENCE

- Object-Oriented Programming, Prototypes, Asynchronous Operations, Promises

2019

*Institut Universitaire de Technologie
Nancy-Charlemagne*

Reviews

Conferences :

- International Conference on Artificial Neural Networks (ICANN). 2023
- International Joint Conference on Artificial Intelligence (IJCAI). 2019

Technical skills

Computer Science

- Python
- C++/C
- Matlab
- Javascript
- ROS