Engineer in Computer Science

Yann Cauchepin

Born the 1997-30-06,
26 years old
Nationality : French & Swiss

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Driving license, Car

Projects & Experience

Current - 09.2023	**Data Scientist, Process Optimization** Development of SmartYield3 : a process control software technology which allows customers to accelerate process design and boost production yield with a unique Deep Learning technology.	Pollen Metrology, *Moirans, France*
08.2023 - 09.2021	**Self-taught work, Learning** Deepening and discovering skills. Coding mini-projects.	Home, *Saint-Julien-en-Genevois, France*
08.2021 - 03.2021	**Reinforcement Learning for Combinatorial Optimization** Creating from scratch a realistic and adaptable environment with economic and sanitary evaluations for a multicriteria optimization. Static and dynamic digitalization of a society. Autonomous work. Python, SumoMobility, Openstreetmap.	University of Luxembourg, *Esch-sur-Alzette, Luxembourg*
02.2021 - 10.2020	**Deep Neural Network Optimization, Machine Learning** Forecasting of energy consumption in partnership with EDF R&D. Simulated annealing, Genetic algorithm, Convolutional layers. Python, Keras, Tensorflow, Deap packages, GRID5000 network, MPI.	Engineering school Polytech, *Lille, France*

Knowledge & Skills

Artificial Intelligence, Machine Learning
Unsupervised, Supervised and Reinforcement learning,
Convolution, Neural network.
Scikit-learn, Keras, Tensorflow framework.

Optimization
Modeling difficulties, Graphs and combinatorics,
Advanced algorithms for optimization and decision,
Metaheuristic, Lindo software.

Programming, GUI, Systems
Data structure and Object-oriented programming.
C++/C, Python, Java languages, Translators, Latex.
wxWidgets, Unix system, Multithreading, Github.

High-performance computing, Distributed processing
Parallelization, Using GPUs, MPI language.
High performance matrix computation methods, PageRank.

Software engineering
Patterns, Metamodeling, UML, Modelio software.

Data Science, Statistics
Data preparation, Management of missing data,
Time series analysis and forecasting, AR, MA, ARIMA,
Markov process, Advanced modeling,
Interpolations and curve fitting,
Classification and clustering, ACP, ACM, AFC,
Multiple, polynomial and regularized regression,
Exploratory, inferential and descriptive statistics,
R, RMarkdown languages, RStudio software.

Big Data
Data fragmentation, Map-Reduce method.
Spark language, Databricks interface.

Database
Relational, SQL, XML, XQuery languages.

Web
JavaScript, CSS, HTML, PHP languages.

Other : Network basis, Basic medical knowledge.

Education

2018 - 2021	**Engineer's degree in Statistics and Computer Science**	Engineering school Polytech, *Lille, France*
2017 - 2018	**Engineer's preparatory class**	Engineering school Polytech, *Grenoble, France*
2015 - 2017	**Common core year for health studies (PACES)**	University Joseph Fourrier, *Grenoble, France*

Languages

French Native language
English Degree B2/C1 **TOEIC** score : 945

Hobbies

Nutrition, Fitness, Weightlifting,
Personal development,