Martin Puig

Master of Science in Computer Science
Georgia Institute of Technology

Graduate engineer in High Performance Computing & Big Data
INP ENSEEIHT

Passionate interest in AI, machine learning, data science, robotics and emerging technologies.

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Education

Atlanta, GA

Georgia Institute of Technology
Metz, France

Master of Science in Computer Science — *2019-2021*

- **Courses :** Machine Learning, Graduate Algorithms, Autonomous Robotics, Artificial Intelligence, Natural Language Processing, Deep Learning, Data Visualization
- 3.9 expected GPA

ENSEEIHT, Institut National Polytechnique de Toulouse
Toulouse, France

Graduate engineer in High Performance Computing & Big Data — *2017-2021*

- **Courses :** Linear Algebra for Data Mining, Operations Research, Discrete & Continuous Optimization, Distributed Storage and Processing of Big Data, Automata Theory, Complex Graph Networks, Partial Derivative Equations, Numerical Simulations ...

Experience

Office National d'Etudes et de Recherches Aérospatiales - ONERA
Paris, France

Research on deep neural network theory — *Feb. 2021 - July 2021*

- French national aerospace research agency
- Research on neural networks calibration

Adriver
Paris, France

Data scientist internship in a tech-oriented Startup — *May 2020 - Nov. 2020*

- Operations research
- Statistics and estimates
- Practical knowledge of the toolbox of a tech Startup

Georgia Tech Lorraine's robotic lab
Metz, France

Autonomous Racecar — *Jan. 2020 - Apr. 2020*

- Developing a small autonomous car, able to race on a track, while avoiding obstacles.
- Computer vision
- Autonomous control and planning

Météo France
Toulouse, France

Research on Deep Learning applied to Meteorology — *Jun. 2019 - Sept. 2019*

- Building a using a U-Net neural network architecture to represent rains and better visualize cyclones using the output of weather forecast models.
- Research presented at the American Meteorological Society's conference on hurricanes and tropical meteorology.

Projects

Neural Style Transfer	Implementation of pictorial style transfer using the 2016 paper
Named entity recognition	NER deep neural network using the BERT architecture
Hadoop-like platform	A distributed platform that processes and computes large data sets, using the MapReduce method.
Arc Tracking	Processing an electrical signal to detect arcs and short circuits in an airplane's embedded systems.
Constrained optimization solver	Full implementation of the of the augmented Lagrangian method using FORTRAN and matlab.
Face recognition	Recognizing faces of my colleagues using the Eigenfaces method.
Sparse Matrix Operations	Implementation and evaluation of various algorithms to multiply sparce matrices.

Skills

Languages	French *-native-*, English, Spanish *-European B2 level-*, Japanese *-learning-*
Programming	Python, Matlab, R, C++, C, Java, Julia, Fortran, OCaml, SQL
Other Tools & frameworks	Amazon Web Service, Google Colab, Jupyter, ROS, Keras, Tensorflow, Linux, Git, Microsoft Office, LaTeX