HAUSMANE ISSARANE

– 26 Years old – FRENCH –

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DATA SCIENTIST FREELANCE

Career goal: Become an international expert in the fields of data science and analytics.

Résumé: Data Scientist specialised in Machine Learning Algorithm and Data Visualisation, with great communication and team skills. Solid experience with Machine Learning, NLP and Python, R, Java.

EDUCATION

2013-2017 **Master Applied Mathematics,** at Polytech Nice-Sophia (Nice, FRANCE).
Relevant Course: Stochastic, probabilities, matlab, R, Optimization.

2014-2016 **Master Data Science**, at Universidad Politécnica de Madrid (Madrid, SPAIN)**.**
Relevant Course: Machine Learning, Cognitive Systems, Data Mining, Big Data.

EXPERIENCE

Oct 2018 - Ongoing **Data & Machine Learning teacher (https://www.udemy.com/user/issarane-hausmane/)**

Jun 2018 - Mai 2019 **Consultant Data scientist at BrightCape, via EIT Digital (Eindhoven, The Netherlands)**
Bright Cape discovers the chances of your data. We analyze, make big data transparent and useful.

PQP project: The focus of this project is to create a customizable analytics tool for predicting product quality in industrial production lines, our customers are big dutch companies such as PHILIPS, VDL or HYDRO. The goal is to improve and to reduce costs of the production.
We are working with Python and librairies like Pandas, Pymssql among others.

The approach consists of three steps:

- Meet the client and understand data and needs
- Developing advanced algorithms to predict the quality of individual products via Machine Learning,based on real-time data from the manufacturing line
- Creation: Integrated & built user-friendly interface such that operators could take real-time action. Linear regression models, Nonlinear simple models, Nonlinear complex models, Bayesian models and Random Forest are used coded with python.

AI-Move project : Ai-Move project integrates Qinematic's Posture Scan, an optical sensor service that gathers detailed information about movement patterns. Ai-Move analyses all the scan data and other metadata to reveal existing or potential problems. The data is visualised through a secure web app available to both the employee and the health service provider.

(https://www.eitdigital.eu/newsroom/news/article/ai-move-the-artificial-intelligence-platform-that-detects-physical-health-related-conditions-in-the/)

My role in this project was to :

- Get the data of bones and joints trajectories from the machine learning system
- Discuss and implement strategies with partners for the customer based in Sweden
- Adapt the data for the visualisation (Python)
- Design and implement computer vision strategies for joints tracking
- Create a modelisation on the front end (Javascript, CSS, THREE.JS)
- Find a way to Compress the huge amount of data

Apr 2017– Mars 2018 **Data Scientist at IDMC (Genève, SWITZERLAND)**
IDMC is a United Nations NGO, collecting data on displacement.

Automation of transcripts thanks to NLP
- Information extraction about internal displacement from structured and unstructured data from the field. PYTHON, pdf's

Prediction of the number of displaced persons
- Selection of the best characteristics among World Bank indicators for internal displacement with statistical tools, such as Principal Components Analysis (PCA), regression.
  Use of machine learning algorithms to predict the number of displaced people based on selected characteristics. PYTHON, SQL

Creating maps and charts for the public annual report
- Data-mining: Extraction of valuable and non-trivial information from the IDMC database (excel sheets and relational database) to create graphs, maps for the report
- http://internal-displacement.org/global-report/grid2017/.

Sep 2016 – Mar 2017 **Internship, deep learning : Adversarial Examples at I3S**
I3S is a French laboratory, during this internship my objective was to validate or refute several hypotheses on the ADVERSARIAL EXAMPLES.
- We have created adversary examples, synthetic examples constructed by slightly modifying the real example in order to make a classifier believe that he belongs to the wrong class with great confidence. And improve the behavior of Machine Learning systems because of the security problems that entails.
  - Implementation PYTHON, THEANO, KERAS.
  - Convolutional Neural Network
  - Big Clusters

Apr- Sep 2014 **Internship, Data Scientist at Gennion**
Gennion is a spanish start-up specialized in IoT
This internship was divided into two parts:
- 1st part : Analyze and extract the data produced by the shell, detect how many people are in a store
- 2nd part : I coded PYTHON pedestrian detection using a Raspberry camera
  The code tracks each person in a store

Projects

Twitter App: Trendings Topics
This application is an example of how to progressively treat any large data flow with Storm and Kafka. The goal of this project is to have an application that makes the trending topics on Twitter for a given period and frequency. For this purpose, it is used sliding window analysis algorithm.Tweet storage with APACHE KAFKA
- APACHE Storm for Hashtag processings

APACHE SPARK Spam detection
We explored the Ling-Spam email dataset containing 2412 ham emails and 481 spam emails, all received by a linguistics-related mailing list. We want to extract the words that are most informative to know if an email is spam or ham. This extraction is called the anti-spam filter.
Natural language processing (lemmatization, word bag, stop words), RDD SPARK engine for processing large volumes of data. SCALA

Professional skills

Languages **French**: Native
English: Fluent **Spanish**: Fluent **Dutch:** Intermediate

Computer Skills ***Languages :*** Java, Python, C++, Shell, SQL, Matlab, R ***Web :*** HTML/CSS, JavaScript, Threejs
Technologies : hadoop, spark, storm, kafka, knime, Eclipse, Scilab,

Interests **Martial Arts, Improvisational Theatre (humour), Music (beatmaking), Soccer.**
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