# Karim Assaad

# PhD student - Engineer - Data Scientist



🗓 kassaad.github.io

# Education

11/2017- Ph.D in Machine Learning:

present Discovery of Causal Relations in Sequences,

LIG - Université Grenoble Alpes, Grenoble, France,

www.liglab.fr.

09/2016- Master 2 in Information Processing

09/2017 and Data Exploitation (with honors),

University of Paris-Saclay, Paris, France,

www.universite-paris-saclay.fr.

09/2014- Degree in Software Engineering,

09/2017 École Nationale Supérieure d'Informatique

pour l'Industrie et l'Entreprise, Evry, France,

www.ensiie.fr.

09/2011 - Bachelor in Applied Mathematics,

06/2014 Université Saint Joseph, Beirut, Lebanon,

www.usj.edu.lb.

#### Publications

K. Assaad, E. Devijver, E. Gaussier, A. Aït-Bachir. Scaling Causal Inference in Additive Noise Models.

2019 In Proceedings of 2019 ACM SIGKDD Workshop on Causal Discovery, Proceedings of Machine Learning Research, Anchorage, USA, 5 Aug 2019. PMLR.

# **Teaching**

Department of Computer Science, University of

2019 Grenoble Alpes: first year of master degree Algo-

rithms for data processing

2019 Grenoble-INP: Algorithmic in Python

#### Activities

Participate in the JES summer school where the 2018 main theme was about statistics and causality

Participate and coordinate a reading group about 2018

causality in the LIG

Participate in ECIR 2018 - 40th European Confer-2018

ence on Information Retrieval

Machine Learning Librairy which include Linear Reg,

2017 Logistic Reg, kNN, K-Means, Formes Fortes and

MLP | Python

2017

Project which consists on estimating missing data

of the Formaldehyde by using decision trees and Neural Networks methods (MLP and Self Orga-

nized maps) | Python

Recognitions of signatures by using a mixtures of

Gaussians | Matlab

2016

Participate in a Kaggle competition that consists on predicting Titanic survivors by using classifica-

2016 tion techniques (Random Forest - SVM - Gradient

Boosting) | R

Project that consists on using advanced regres-2015 sion techniques and feature engineering in order to

predict house prices |R

Project that transforms a grayscale images into 2014

realistic colored images | Matlab

2013 Program that calculates eigenvalues(QR) |C

### **Experiences**

11/2017 Data Scientist

present Coservit, Grenoble, France, www.coservit.fr

Finding causal relations in monitoring data | Python,

Tensorflow

04/2017 - Statistical Analyst (Internship)

Crédit Agricole, Paris, France, www.ca.com 10/2017

> Natural language processing and web scraping in order to collect data and developing a semisupervised model to optimize production and risk

Python, Spark

03/2017-Data Scientist (Research Internship)

04/2017 Locean, Paris, France, www.locean-ipsl.upmc.fr Prediction of chlorophyll concentration using sat-

telite image time series using Deep Learning methods(CNN and LSTM) and find the best validation

methods | Python

06/2016- Data Miner (Internship)

09/2016 Weborama, Paris, France, www.weborama.com Optimizing digital advertising activities by model-

ing and segmentation | Python, R

# Certificates

2018 Neural Networks and Deep Learning

Deeplearning.ai on Coursera

2017 Machine Learning

Stanford University on Coursera

Dev 361 - Build and Monitor Apache Spark 2017

MapR Academy

Dev 360 - Apache Spark Essentials 2017

MapR Academy

#### Computer Skills

Data Python, Tensorflow, Spark, R, MatLab, Scala

**Processing:** 

Database: Mysql, Postgresql, Hive

Web: PHP, Html5/CSS, Javascript, JQuery, XML

Functional: Ocaml, Lisp

Imper/Obj: C, C++, Java

#### Languages

English (Fluent), French (Fluent), Arabic (Fluent)

# Personal interests

Skiing, Classical Guitar and Classical Music