# Jad DARROUS | Curriculum Vitae

15 Rue du Gros Chêne, 44300 Nantes, France

## My Research during my Ph.D.

Ph.D. Topic.

I'm working on Data Management in a Geo-distributed Cloud environment. More specifically, we investigate efficient
management of Virtual Machine Images (VMIs) and container images in the context of Geo-distributed cloud and
Fog/Edge environments. Keyword: Data management, Geo-distributed Clouds, Wide-Area Networks, Distributes storage
systems, Virtual Machine Images.

## Research Project.

- o I'm part of DISCOVERY Initiative, a research project that explores the methodologies and algorithms needed to deploy and operate massively distributed cloud infrastructure.
- o My advisors are Shadi Ibrahim and Christian Perez.
- o I'm a member of Avalon team of Inria research center.

## Publications in International conferences.

o J. Darrous, S. Ibrahim, A.C. Zhou, C. Perez, "Nitro: Network-Aware Virtual Machine Images Management in Geo-Distributed Clouds" in *CCGrid* - May. 2018, Washington DC, USA. Acceptance rate of 20.8%

## Publications in National conferences.

o J. Darrous, "On the (In)Efficiency of IPFS for Geo-distributed Virtual Machine Images Management" in *Conférence en Parallelisme, Architecture et Système (ComPAS)* - Jun. 2017, Sophia-Antipolis, France.

### Papers reviews.....

o I reviewed papers as subreviewer in Cluster 2017, CCGrid 2017 and CloudCom 2017.

### **Education**

### Academic Qualifications.

PhD in Informatics (ongoing)

École Normale Supérieure (ENS) de Lyon

Master in Parallel and Distributed Systems

University Grenoble-Alpes, Graduation mention is Very Good

**Bachelor in Computer Science** 

Damascus University, Graduation mention is Very Good

**Lyon, France** 2016–2019

Grenoble, France

2014–2016

Damascus, Syria

## 2007–2012

### Research Internships.

o A Programming and Data Model for In-Situ frameworks

'Inria Grenoble Rhône-Alpes research center', Feb - Jun 2016

As a member of the DataMove team and under the supervision of Bruno RAFFIN, I did my Master's internship in the domain of in-situ analytics. The goal was to design a new Programming and Data Model for In-Situ frameworks to ease the representation of expressiveness of complex scientific workflow.

o Improving the EASY-Backfilling scheduler using Machine Learning algorithms

'Inria Grenoble Rhône-Alpes research center', May – Jul 2015

Improve the EASY-Backfilling scheduler in HPC environment using Machine Learning algorithm called Learning to Rank. An average improvement of 68% has been achieved in case the job run-time is already known (clairvoyant). My advisors were Denis TRYSTRAM and Eric GAUSSIER.

### Notable Projects.....

- One Month Master Project: NachOS: Mini Operating System 2015
   In a group of 4 students, we implemented IO routines, multithread model, virtual memory, file system, and networking in an instructional Operation System called NachOS. Average ratings is 16 out of 20
- Graduation project: Hand gesture recognition and Fingers detection 2012
   Detect and recognize the hand, hand gesture and fingers gestures from Kinect depth sensor. Average ratings is 95 out of 100.
- 4 Months project: Opinion Mining and Sentiment Analysis 2011
   extract the positives and negatives opinions about products and their features from a free-form text crawled from the web. Average ratings is 94 out of 100.

## **Previous Employment**

### Syrian Educational Publisher Co., for E-Publishing and E-learning

Damascus, Syria

Software Developer

Jan 2013-August 2014

I was a Software Developer (Web and Android) in small-sized company of 13 developers applying the Scrum agile methodology. Accomplished tasks:

- Extend the core libraries to cover more of the EPUB3 spec.
- Implement Unit Testing for the core libraries with code coverage of 70%.
- Develop 60% of the Android application (Epub3 Viewer).
- Implement the first prototype of the GWT website.
- Implements synchronization between applications running on different devices.

### **Technical skills**

- Expertise in C++ (programming competitions), Java (professional experience) and Python (research prototyping).
- Good experience with (SQL and NoSQL) databases.
- o Good experience in network programming and multi-threading.
- o Familiar with the topics related to Natural Language Processing, Data Mining and Machine Learning.

### **Honors and Awards**

- o PERSIVAL-Lab scholarship for academic excellence for the year 2015-2016.
- I was an active member in programming competitions (2009-2014):
  - I represented Damascus University (Faculty of Informatics) in the ACPC programming contest the regional tier of ICPC within a team of 3 students, and we got the  $8^{th}$ ,  $14^{th}$ , and  $11^{th}$  place consecutively from 2009 to 2011.
  - I coached the teams of Damascus University in the ACPC programming contest 2012 and 2013.
  - I was a judge in the Syrian Collegiate Programming Contest (SCPC) the national tier of ICPC in 2012 and 2013.
  - I was a problems setter in many national and local contests.
- $\circ$  The  $8^{th}$  place in the fourth annual *Math Olympiad* contest held by Department of mathematics, Damascus University 2012.
- o We won, as a team of three, the  $3^{rd}$  place in *Fikra Competition* for our "Simple Geometry Solver" project, Damascus 2011.

### **Hobbies**

- o I regularly practice cycling, skating, swimming and hiking.
- o I was Chief scouts of a groups of children (around 12 year old), 2007-2010.