# **Federico** Croce

#### CONTACT

#### **ABOUT ME**

My research activities concentrated on finding new applications of the Ontology-Based Data Management paradigm related to the Explainable Artificial Intelligence.

#### **EDUCATION AND TRAINING**

2017 - CURRENT - Rome, Italy

Ph.D in Engineering in Computer Science

Sapienza University of Rome

2015 - 2017 - Rome, Italy

Master of Science in Engineering in Computer Science

Sapienza University of Rome

110/110 cum laude

#### **Excellence Path**

Grading in list: 1st

"Excellence Path" of the master degree in Engineering in Computer Science. During the Path I worked with Semantic Technologies applied to database systems.

**2012 - 2015** - Rome, Italy

Bachelor Degree in Engineering in Computer Science

Sapienza University of Rome

110/110 cum laude

#### **Excellence Path**

"Excellence Path" of the bachelor degree in Engineering in Computer Science. During the Path I wrote a report on the technologies behind computer chess programs and I developed a facial recognition tool to be used as a login facility.

**2007 - 2012** - Rome, Italy

Scientific Certificate - Secondary School diploma

LSS Benedetto Croce

## **WORK EXPERIENCE**

**01/2020 – CURRENT** – Rome, Italy

Head of Artificial Intelligence

GMATICS S.r.l.

Design, implementation and management of Artificial Intelligence solutions to remote sensing with

satellites and airborne imageries.

**10/2018 - 10/2019** - Pasadena, United States

Visiting Researcher - Data Engineer

NASA Jet Propulsion Laboratory

Application of Machine Learning solutions to remote sensing with satellites and airborne imageries. Collaboration in the joint ESA/NASA Multi-Mission Algorithm and Analysis Platform (MAAP)

11/2017 - CURRENT

## Data Engineer for OBDA Systems

**OBDA Systems** 

Data Engineer for the Sapienza startup OBDA Systems. The business value of the startup is to propose state-of-the-art solutions based on the most recent innovations in the field of semantic technologies to provide its clients with a direct and effective means for extracting key data from large and complex datasets.

Rome, Italy

#### 12/2017 - CURRENT

## **Teaching Assistant in Engineering in Computer Science**

Sapienza - University of Rome

- Teaching of laboratory lessons
- Preparing and checking Homeworks and Assignments
- Office Hours

Rome, Italy

#### 10/2015 - 07/2016

# Full Stack Developer of a web-based application for the CRM management

Nuove Visioni S.r.l.

Design, development and maintenance of the database as well as integration of it with the web application.

Guidonia (RM), Italy

## **HONOURS AND AWARDS**

Honours and awards 19/06/2015

honour scholarship, "alla memoria dei Coniugi Ernesto e Iole DE MAGGI"

www.fondazionesapienza.uniroma1.it/

## **PUBLICATIONS**

## Explaining Classifiers in Ontology-Based Data Access

#### 2020

F Croce, M Lenzerini

Workshop XLoKR at the 17th International Conference on Principles of Knowledge Representation and Reasoning (KR2020)

## Ontology-based explanation of classifiers

#### 2020

F Croce, G Cima, M Lenzerini, T Catarci 2nd International Workshop on Processing Information Ethically at EDBT/ICDT.

On Queries with Inequalities in DL-LiteR≠.

#### 2019

G Cima, F Croce, M Lenzerini, A Poggi, E Toccacieli 32nd International Workshop on Description Logics (DL2019)

A Framework for Explaining Query Answers in DL-Lite

#### 2018

F Croce, M Lenzerini

21st International Conference on Knowledge Engineering and Knowledge Management (EKAW2018)

On the Experimental Usage of Ontology-based Data
Management for the Italian Integrated System of Statistical
Registers: Quality Issues

#### 2018

F Croce, DF Savo, M Lenzerini, et al. European Conference on Quality in Official Statistics (Q2018)

#### **CONFERENCES AND SEMINARS**

#### Conferences

**4-th International Winter School on Big Data (BigDat2018)**, Timisoara, Romania

The winter school will take place from 22/01 to 26/01 2018. The lectures will be:

- Big Data in biomedical science
- MapReduce algorithms for Big Data
- Semantic Technologies for Open data publishing
- Unstructured Big Data

and more.

Curatorship: Jeffrey Ullman (Stanford University)

Character: Student

http://grammars.grlmc.com/BigDat2018/index.php

**Reasoning Web Summer School (RW 2017)**, University of Birbeck, Londra

The summer school took place from 7/7 to 11/7 2017. The lectures were:

- Semantic Data Integration on the Web of Open Data
- Ontological query answering over semantic data
- Integrating Relational Databases with the Semantic Web
- OBDA for log extraction in process mining and more.

Curatorship: Domenico Lembo, Università La Sapienza - Roma

Character: Student

2017.ruleml-rr.org/call-for-13th-reasoning-web-summer-school-rw-2017/

Extending Database Technologies Summer School (EDBT 2017) , Nervi (GE) , Genova

The summer school took place from 4/9 to 8/9 2017. The lectures were:

- Crowd Data Sourcing
- Query Answering
- Intelligent Web Extraction
- Data Quality
- Data Integration

and more.

Curatorship: Georg Gottlob, Oxford University, UK

Character: Student

http://edbtschool2017.dibris.unige.it/

#### LANGUAGE SKILLS

MOTHER TONGUE(S): Italian

**OTHER LANGUAGE(S):** 

**English** 

<b>Listening</b> C2	<b>Reading</b> C2	Spoken production C1	Spoken interaction C1	<b>Writing</b> C2
French Listening A1	<b>Reading</b> A1	Spoken production A1	Spoken interaction A1	<b>Writing</b> A1

#### **DRIVING LICENCE**

Driving Licence: A
Driving Licence: B

## ORGANISATIONAL SKILLS

Organisational skills

Good leadership and team-work planning skills. Excellent resilience and resistance to high stress and hostile environments. Capability of working in a multicultural team while maintaining impartiality and objectivity.

## COMMUNICATION AND INTERPERSONAL SKILLS

Communication and interpersonal skills

Good communication and contact skills also in a multicultural environment. Capability of obtaining and maintaining people's attention while remaining focused. Good team-working skills.

## **IOB-RELATED SKILLS**

Job-related skills

Good teaching and mentoring skills. Propensity for research and study. Self-reliant and reliable in carrying out duties. Good exposition and public presentation skills.

## **OTHER SKILLS**

Other skills

Scout AGESCI since 2004. Black belt first DAN Karate (SHOTOKAN) since 2010. PADI Advanced Open Water Diver since 2015. 6 years of musical studies both theoretical and practical (Piano and Guitar). Agonistic swimmer and short CONI experience. BLS-D (Basic Life Support and Defibrillation) certificate released by Croce Rossa Italiana, May 2017.

#### **VOLUNTARY WORK EXPERIENCES ABROAD**

Studies and experiences abroad

2011:

Voluntary work at Brighton & Hove Wood Recycling Project https://www.woodrecycling.org.uk/

Place: **Brighton (United Kingdom)** | Language: English | Duration: 3

(months)