

Federico Croce

Ph.D. Student in Engineering in Computer Science
at Sapienza University of Rome

Nationality: Italian
Date of Birth: 03/16/1993
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EDUCATION

Sapienza University of Rome, Rome— *Ph.D.*

OCT 2017 - PRESENT

Estimated thesis defense: Jan 2021
Topic: Explainable Artificial Intelligence and Interpretable Machine Learning
Supervisor: Prof. Maurizio Lenzerini

Sapienza University of Rome, Rome— *Master of Science in Engineering in Computer Science*

SEP 2015 - OCT 2017

Graduated Summa Cum Laude
Thesis: *Explaining Query Answers in DL-Lite*
Advisor: Prof. Maurizio Lenzerini

Sapienza University of Rome, Rome— *Bachelor of Science in Engineering in Computer Science and Automation*

SEP 2012 - JUL 2015

Graduated Summa Cum Laude

WORK EXPERIENCE

[NASA Jet Propulsion Lab](#), Pasadena (CA)— *Visiting Researcher*

OCT 2018 - OCT 2019

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](#))

[OBDA Systems S.r.l.](#), Rome— *Junior Researcher*

OCT 2017 - OCT 2018

Design and Implementation of a module for explaining query answers, of the [MASTRO](#) Ontology Based Data Access reasoner

[ISTAT](#), Rome— *Technical Advisor*

NOV 2017 - MAR 2018

Successful Proof of Concept to verify the feasibility of applying the Ontology Based Data Management paradigm to the census data of the Italian National Statistics Institute

PROGRAMMING SKILLS

Languages: Python, Java, C/C++, R, SQL, SPARQL

Mobile: Android

Frameworks: Hadoop, Apache Spark, Apache Storm, Apache Hive

Databases: Oracle, MS SQL, PostgreSQL, Dynamo, MongoDB, Neo4j, Sesame

Cloud: AWS, Azure

Methodologies: SCRUM, Extreme Programming

AWARDS

Ph.D. Scholarship. 3 years scholarship, for the whole duration of the Ph.D., awarded by Sapienza University of Rome 2017–2020.

Excellent Graduate. Selected as the top 2% of all Sapienza University of Rome students graduating in 2016/17.

Excellence Path. In-depth extra-curricular research activities focused on Semantic technologies, and AI applied to board games. Obtained for merit both in 2015 (B.S.) and 2017 (M.S.)

Honor Scholarship and Grant. Awarded in 2015 by the [Sapienza alumni foundation](#) for merit

TEACHING EXPERIENCE

Teaching Assistant—*Department of Engineering in Computer Science, Automation and Management, Sapienza University of Rome*

OCT 2019 - PRESENT

Course: Database Systems

Teaching Assistant—*Department of Engineering in Computer Science, Automation and Management, Sapienza University of Rome*

DEC 2017 - SEP 2018

Course: Advanced Computer Science Fundamentals

Teaching Assistant—*Department of Electrical and Telecommunication Engineering, Sapienza University of Rome*

DEC 2017 - JUN 2018

Course: Computer Science Fundamentals

PUBLICATIONS AND INVITED LECTURES

- Cima, G., Croce, F., Lenzerini, M., Poggi, A. and Toccaceli, E., “On Queries with Inequalities in DL-LiteR_≠.” *CEUR Workshop Proceedings*, Vol. 2373. CEUR-WS, 2019
- Croce, F. and Maurizio, L., “A Framework for Explaining Query Answers in DL-Lite.” *Lecture Notes in Computer Science* 11313: 83–97, 2018
- Aracri, R.M., Bianco, A.M., Radini, R., Scannapieco, M., Tosco L., Croce, F., Savo, D.F. and Lenzerini, M., “Ontology-based Data Management for the Italian Integrated System of Statistical Registers: Quality Issues” *Proceedings of European Conference on Quality in Official Statistics*, JUN 26–29, 2018
- **Workshop**, MASTRO: Semantic technologies for data management, 13th National Conference in Statistics, JUL 2018

PROFESSIONAL TRAINING

Seminars

10/16/2019, Intel Software Development Workshop for Technical Computing and HPC, Rome. Intel Parallel Studio XE for optimizing vectorized computations on Intel machines
06/19/2018, AWSome Day Roma, Rome, Luiss Enlabs. Amazon Web Services: EC2, S3, EBS, RDS, VPC, IAM

Ph.D. Schools

01/22–26/2018, International Winter School on Big Data 2018, Timișoara, Romania.
09/04–09/2017, Extending Database Technologies 2017, Genova Nervi, Italy
07/07–11/2017, Reasoning Web 2017, University of Birkbeck, London, UK.

LANGUAGES

Italian (Native), English (C1)

COMMUNITY SERVICES

Voluntary Work, Brighton and Hove, UK. [Brighton & Hove Wood Recycling Project](#)
JUN 2011 - SEP 2011

PERSONAL INTERESTS

Music instruments: Piano and Guitar

PADI Advanced Open Water Diver since 2015

Basic Life Support and Defibrillation (BLS-D) certificate, May 2017

Black belt first DAN Karate (SHOTOKAN) since 2010

AGESCI Scout since 2004

Agonistic swimmer at the Italian National Olympic Committee ([CONI](#))

Driving licence for motorbikes and cars