FEDERICO CROCE

Engineer in Computer Science with proven skills on Large Scale Information Integration and Big Data Management. Enthusiastic and motivated junior researcher in applying Semantic Technologies to Data Management. Demonstrated exceptional communication and mentoring skills, as well as team-working propensity, without sacrificing the ability to work independently.

EDUCATION

PhD   Sapienza University of Rome, Computer Science   Nov. 2017 - Ongoing
Supervisor: Prof. Maurizio Lenzerini

MS   Sapienza University of Rome, Engineering in Computer Science   Oct. 2017
Thesis: "Explaining Query Answers in *Dl-Lite*"
Advisor: Prof. Maurizio Lenzerini
Graduated Summa Cum Laude

BS   Sapienza University of Rome, Engineering in Automation   Jul. 2015
and Computer Science
Graduated Summa Cum Laude

HONORS AND AWARDS

Excellent Graduate A.Y. 2016/17   2017
Top 2% of Sapienza graduating students for the 2016/17 Academic Year.

MS Excellence Path   2017
In-depth extra-curricular research activities focused on Semantic Technologies
accessible through competitive selection based on university marks.
Grading in list: 1st.

Honor Scholarship and Grant   2015
Alla memoria dei Coniugi Ernesto e Iole DE MAGGI
Awarded by www.fondazionesapienza.uniroma1.it/

BS Excellence Path   2015
In-depth extra-curricular research activities focused on Artificial Intelligence
applied to board games accessible through competitive selection based on
university marks.

Working Experience

Visiting Researcher, NASA Jet Propulsion Lab   2018 – 2019
Software Developer and Junior Researcher involved in the Earth Science section.
Application of Machine Learning solutions to remote sensing with satellites
and airborne imageries. Collaborations on the joint ESA/NASA
Multi-Mission Algorithm and Analysis Platform (MAAP - https://maap.xyz/)

Research and Development, Sapienza University of Rome   2018 – Ongoing
*Ontology-based data management for health-related quality of life of
thyroid cancer patients*
Research project aiming at applying the Ontology Based Data Management
methodologies and techniques to the domain of thyroid cancer patients.

Research and Development, OBDASystems S.r.l.   2017 – Ongoing
Improvement of the state of the art solutions for Data Integration, Ontology
Design and Development, Big Data Analytics, Data Extraction from
large and complex datasets.

Technical Advisor, Istituto Nazionale di Statistica (ISTAT)   Nov. 2017 - Mar. 2018
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.

Full-stack Developer, Nuove Visioni S.r.l.   Oct. 2015 - Jul. 2016
Development of a web based Customer Relationship Management application.

Teaching Experience

Teaching Assistant, Department of Engineering in Computer   Dec. 2017 - Ongoing
Science, Automation and Management, Sapienza University of Rome.
Course in *Advanced Computer Science Fundamentals*. Duties involved: teaching of
laboratory lessons, preparing and checking homework and assignments, office hours.

Teaching Assistant, Department of Electrical and   Dec. 2017 - Ongoing
Telecommunication Engineering, Sapienza University of Rome.
Course in *Computer Science Fundamentals*. Duties involved: teaching of laboratory lessons,
preparing and checking homework and assignments, office hours.

Presentations and Invited Lectures

Workshop, "*MASTRO: tecnologie semantiche al servizio della gestione dei dati*", 13th
National Conference in Statistics, Jul. 2018.

PUBLICATIONS

Peer Reviewed Proceedings of Conferences

Cima, G., **Croce, F.**, Lenzerini, M., Poggi, A., Toccacieli, E., "On queries with inequalities in DL-Lite$_\mathcal{R}^{\neq}$" Proceedings of the 32nd International Workshop on Description Logics, June 18-21, 2019.

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.

Croce, F. and Lenzerini, M., "Explaining Query Answers in *DL-Lite*" Proceedings of EKAW, Nov. 12-16, 2018.

PROFESSIONAL TRAINING

Seminar
19/06/2018 AWSome Day Roma, Luiss Enlabs.
Training on the fundamental services offered by AWS: EC2, S3, EBS, RDS, VPC, IAM.

Winter Schools
International Winter School on Big Data 2018, Timisoara, Romania.
Big Data in Biomedical Science, MapReduce Algorithms for Big Data, Unstructured Big Data.

Summer Schools
Reasoning Web 2017, University of Birkbeck, London, UK.
Semantic Data Integration, Integrating Relational Databases with the Semantic Web, Ontology Based Data Access for Process Mining.

Extending Database Technologies 2017, Genova Nervi, Italy.
Crowd Data Sourcing, Intelligent Web Extraction, Data Quality.

COMMUNITY SERVICE

Voluntary Work, Brighton and Hove, UK.
Brighton & Hove Wood Recycling Project: https://www.woodrecycling.org.uk
Duration: 3 months

LANGUAGES

Italian: Native Speaker.

English: Excellent in Listening, Speaking, Reading and Writing.

COMPUTER SKILLS

Programming: Python, C/C++, Java, JavaScript, HTML, CSS, php, SQL, SPARQL.

Mobile: Android

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

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

Platforms: AWS, Azure.

Methodologies: SCRUM, Extreme Programming.

PERSONAL SKILLS

Good team-working and leadership skills also in a multicultural environment.

Excellent resilience and resistance to high stress and hostile environments.

Self-reliant and reliable.

Good exposition and public presentation skills.

INTERESTS

AGESCI Scout since 2004.

Black belt first DAN Karate (SHOTOKAN) since 2010.

PADI Advanced Open Water Diver since 2015.

6 years of both theoretical and practical musical studies (Piano and Guitar).

Agonistic swimmer and training experience at Comitato Olimpico Nazionale Italiano (CONI).

Basic Life Support and Defibrillation (BLS-D) certificate released by Croce Rossa Italiana, May 2017.

Driving licence type A (motorbikes) and B (cars).