PERSONAL INFORMATION   Manuel Namici

CURRENT POSITION

11/2018-Present   **Ph.D. student in Enginnering in Computer Science**
Sapienza, University of Rome   DEPARTMENT OF COMPUTER, CONTROL, AND MANAGEMENT ENGINEERING
TOPIC: Data integration through semantic technologies, ontology-based data access and integration
SUPERVISOR: Prof. Giuseppe De Giacomo

FELLOWSHIPS

07/2020-Present   **Research grant**
Sapienza, University of Rome   DEPARTMENT OF COMPUTER, CONTROL AND MANAGEMENT ENGINEERING
RESEARCH TITLE: Ontology-based Data Access with LAV and GLAV mappings.

04/2019-04/2020   **Research grant**
Sapienza, University of Rome   DEPARTMENT OF TRANSLATIONAL AND PRECISION MEDICINE
RESEARCH TITLE: Development of a patient-centered system for the management and analysis of data about health-related quality of life.
RESEARCH DESCRIPTION:
The goal of this research project is to address the need of integrating and comparing *patient-reported outcomes*, like those resulting from traditional clinical trials, with *medical records* in the evaluation of the effect on the quality of life of currently adopted pharmacological treatments, for patients affected by oncological diseases. We are designing a data preparation system, based on the *ontology-based data management approach*, that allows to gather multiple health-related patient data into a knowledge graph, by integrating subjective data (the patient-reported outcomes), physician-derived medical records, and objective data (primarily health-related data seamlessly collected by personal devices such as smartphones, laboratory data and radiological evaluation). The role of this knowledge graph is to provide real-life data to estimate both the efficacy and the impact on the patients' quality of life of current treatments, by providing a framework that acts as the base for modern data analysis algorithms.

06/2018-11/2018   **Scholarship**
Sapienza, University of Rome   DEPARTMENT OF COMPUTER, CONTROL, AND MANAGEMENT ENGINEERING
RESEARCH TITLE: Performance analysis for Ontology-based Data Access systems.
SUPERVISOR: Prof. Maurizio Lenzerini

EDUCATION

03/2018   **M.Sc. Engineering in Computer Science**

| Sapienza, University of Rome | DEPARTMENT OF COMPUTER, CONTROL, AND MANAGEMENT ENGINEERING |

THESIS TITLE: *R2RML Mappings in OBDA Systems: Enabling Comparison among OBDA Tools*

SHORT ABSTRACT:

The Ontology-Based Data Access (OBDA) paradigm aims at providing to the users a unified and shared conceptual view of the domain of interest (ontology), while still enabling the data to be stored in different data sources. Such data are mapped to the ontology through declarative specifications. In this work we consider the ontology expressed in OWL 2 QL, relational sources, the mapping expressed in R2RML, and the user queries expressed in SPARQL. In this W3C-compliant setting, we compare query answering in the two main tools for OBDA, namely, Mastro and Ontop, by resorting to the NPD Benchmark, and the full-fledged OBDA application developed for the Italian Automobile Club (ACI). We also discuss how R2RML support is added to Mastro.

SUPERVISOR: Prof. Giuseppe DE GIACOMO

FINAL GRADE: 110/110 *summa cum laude*

11/2013	B.Sc. in Engineering in Computer Science
Sapienza, University of Rome	DEPARTMENT OF COMPUTER, CONTROL, AND MANAGEMENT ENGINEERING
	FINAL GRADE: 108/110

PUBLICATIONS

— Manuel Namici, Giuseppe De Giacomo, and Maurizio Lenzerini. Extending DL-LiteR TBoxes with View Definitions. In Stefan Borgwardt and Thomas Meyer, editors, *Proceedings of the 33rd International Workshop on Description Logics (DL 2020) co-located with the 17th International Conference on Principles of Knowledge Representation and Reasoning (KR 2020), Online Event [Rhodes, Greece], September 12th to 14th, 2020*, volume 2663 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2020

— Valerio Santarelli, Lorenzo Lepore, Manuel Namici, Giacomo Ronconi, Marco Ruzzi, and Domenico Fabio Savo. Monolith: an OBDM and Knowledge Graph Management Platform. In Mari Carmen Suárez-Figueroa, Gong Cheng, Anna Lisa Gentile, Christophe Guéret, C. Maria Keet, and Abraham Bernstein, editors, *Proceedings of the ISWC 2019 Satellite Tracks (Posters & Demonstrations, Industry, and Outrageous Ideas) co-located with 18th International Semantic Web Conference (ISWC 2019), Auckland, New Zealand, October 26-30, 2019.*, volume 2456 of *CEUR Workshop Proceedings*, pages 173–176. CEUR-WS.org, 2019

— Lorenzo Lepore, Manuel Namici, Giacomo Ronconi, Marco Ruzzi, and Valerio Santarelli. The Mastro Ecosystem: Ontology-Based Data Management from Theory to Practice. In *2nd IEEE International Conference on Artificial Intelligence and Knowledge Engineering, AIKE 2019, Sardinia, Italy, June 3-5, 2019*, pages 101–102. IEEE, 2019

— Manuel Namici and Giuseppe De Giacomo. Comparing query answering in OBDA tools over w3c-compliant specifications. In Magdalena Ortiz and Thomas Schneider, editors, *Proceedings of the 31st International Workshop on Description Logics co-located with 16th International Conference on Principles of Knowledge Representation and Reasoning (KR 2018), Tempe, Arizona, US, October 27th - to - 29th, 2018.*, volume 2211 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2018

— Manuel Namici. R2RML mappings in OBDA systems: Enabling comparison among OBDA tools. *CoRR*, abs/1804.01405, 2018

WORK EXPERIENCES

| 2018-Present | Scientific software developer at Sapienza/OBDA Systems |

I am involved in the development of MASTRO, an ontology-based data access system, developed at Sapienza, University of Rome.

Starting from 2018 I'm also the lead maintainer of EDDY, a desktop application for the specification and visualization of GRAPHOL ontologies.

During this period I've also contributed to several other accademic software projects, including:

− MONOLITH: an OBDM and knowledge graph management platform.
− BLACKBIRD: an ontology-based relational database migration system.

TEACHING

Fall 2019 Tutor of the course "Progettazione del Software", Bachelor Degree in Engineering in Computer Science, A.Y. 2019-20.

COMPUTER SKILLS

Programming languages	C, C++, OBJECTIVE-C, JAVA, PYTHON, RUBY, PHP, JAVASCRIPT, SWIFT, UNIX SHELL SCRIPTING
Operating systems	GNU/LINUX, MACOS, MICROSOFT WINDOWS
DBMS	MySQL, PostgreSQL, Oracle
Development environments	Eclipse, IntelliJ IDEA, PyCharm, Netbeans, Xcode
Other	HTML, XML, OWL, RDF, SPARQL, Protégé, Mastro, Ontop, Hadoop, HBase, Cassandra

PERSONAL SKILLS

Mother tongue Italian

Other languages

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C2	C2	C1	C1	C1

English

Other skills I am a skilled programmer, with a good knowledge of several programming languages including Java, Python, C, C++, Javascript, and software frameworks including Spring Boot, Hadoop, Qt, React.

During my bachelor's and master's degree I have also worked as a mobile application developer where I had the chance to acquire a good knowledge of the techniques and tools that are involved in the software engineering and development process.

AI FINI DELLA PUBBLICAZIONE

Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003 n. 196 Codice in materia di protezione dei dati personali.

Firmato, Manuel Namici