

PERSONAL INFORMATION



Federico Desimoni

📍 Via Salvo D'Acquisto 4, Carpi, Modena, Italia

✉ federicods1994@gmail.com

Gender Male | Date of birth 05 June 1994

WORK EXPERIENCE

February 2019 – February 2020

Research Fellow

Dipartimento di Ingegneria "Enzo Ferrari", Modena, Italy
Big Data and Semantic Analysis. This experience allowed me to work over two major fields: Semantic Web and Big Data Analysis. In the Semantic Web context, I directed the re-engineering and the upgrading of a web application, H-BOLD, which simplify the exploration of Linked Data sources through a visual representations, and I contributed to the writing of a book, "Linked Data Visualization: tools, techniques and big data", focused on the evaluation of the tools which represent the state of the art in Linked Data visualization. For the Big Data context, I was enrolled in the development of a system for the extraction, analysis, comprehension and aggregation of data crawled from Internet. In this experience I deepened my knowledge over big data analysis through the usage of open source tools like Apache Hadoop, Spark and Zeppelin. This research grant was founded by Emilia Romagna and was carried out with the collaboration of Expert System

July 2018 – January 2019

Internship

Dipartimento di Ingegneria "Enzo Ferrari", Modena
Research, analysis and evaluation of tools for visualizing Linked Data. Since no guidelines are provided for users who wants to explore Linked Data sources, during this period, I collected several LD visualization tools. The working ones have been extensively tested and they have been evaluated over different features and goals.

June 2013 – August 2013

Support teacher

IIS Antonio Meucci, Carpi
Math and geometry recovery lessons for high school students with certified learning disability

EDUCATION AND TRAINING

2016 – 2019

Master's degree in Computer Engineering

Università degli Studi di Modena e Reggio Emilia, Modena, Italia

Final mark: 103/110

Thesis: "Empirical Evaluation of Linked Data Visualization Tools"

This thesis aims at providing guidelines to users for exploring sources of Linked Data. After collecting several Linked Data visualization tools, they have all been tested and a then evaluated accordingly to different features and to the task users can accomplish with.

2013 – 2016 **Bachelor's degree in Computer Engineering**

Università degli Studi di Modena e Reggio Emilia, Modena, Italia

Final mark: 99/110

Thesis: Development of a tool for the graphical representation of the news published on the main Italian newspapers

The goal was to create an application capable of creating a graphical representation of news collected from 20 Italian newspapers and then clustered through KeyGraph algorithm. The final result was a web application that adopted JSP technology as a backend and D3.js library for the frontend.

2008 – 2013 **Diploma of accountant, programmer and commercial expert**

I.I.S. Antonio Meucci, Carpi, Modena (Italy)

Final mark: 85/100

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
Spanish	A2	A2	A2	A2	A2
German	A2	A2	A2	A2	A2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user
Common European Framework of Reference (CEF) level

Organisational / managerial skills

Good skills in both team and individual working
Good calculation skills
Good skills in problem solving
Learn continuously

Computer skills

Programming and mark-up Languages: C, C++, Visual Basic, Pascal, Java, Python, HTML, Javascript, LaTeX
Database management: PostgreSQL, MongoDB, Redis, SQL server, Mysql, MS access
Development environment: Visual Studio, Eclipse, PyCharm
Text editor: Emacs
Microsoft Office package

Driving licence

B

PROJECTS

July 2019 – now: development of a web application for the visualization of the content of Linked Data sources. The application, called H-BOLD, gathers data from a given SPARQL endpoint, extracts several indexes and builds different visual representation of its content.

November 2018 – now: I am participating to the international project called "TRAFAIR Understanding traffic flows to improve air quality" co-financed by the European Union through the call CEF TELECOM, GA No INEA/CEF/ICT/A2017/1566782. program

February 2018: This activity followed my bachelor's thesis project. The three software that retrieve, cluster and create visual representation of the news published on 20 main Italian newspapers didn't cooperate harmoniously. I automatized this process so that no human interaction is needed anymore.

PUBLICATIONS

Laura Po, Nikos Bikakis, Federico Desimoni and George Papastefanatos, *Linked Data Visualization: tools, techniques and big data*, Morgan&Claypool editors, 2020

Federico Desimoni and Laura Po, *Providing effective visualizations over linked data*, BigVis 2020: 3rd International Workshop on Big Data Visual Exploration and Analytics, EDBT/ICDT 2020 join conference, Copenhagen, 30/03/2020

Chiara Bachechi, Federica Rollo, Federico Desimoni, and Laura Po, *Using real sensors data to calibrate a traffic model for the city of Modena*, Intelligent Human Systems Integration: Integrating People and Intelligent Systems (IHSI), Modena, 2020

Federico Desimoni and Laura Po, *Empirical Evaluation of Linked Data Visualization Tools*, 2019, submitted to the Special Issue on "Data Exploration in the Web 3.0 Age" of the "Future Generation Computer Systems"

ADDITIONAL INFORMATION

Certificates

December 2012: First Certificate of English (FCE) provided by University of Cambridge ESOL Examination