

PERSONAL INFORMATION

Danilo Dessì

SHORT DESCRIPTION

I am an enthusiast young computer scientist. I am a Ph.D. candidate at the University of Cagliari who would like to continue his professional growth doing research. I like to learn how things work and push up myself to address more and more challenging tasks. Thanks to the passion my supervisors conveyed to me, I would like to continue building my carrier in computer science research areas such as Machine Learning, Natural Language Processing, and Sentiment Analysis which I have been working on during the last three years.

PROFESSIONAL EXPERIENCE

April 2019-July 2019
(4 months)

Academic Tutor Computer Architecture

University of Cagliari, Science Faculty, Degree course in Computer Science, Cagliari (Italy)

Design of Combinational Circuits - Microarchitecture - INM Language - Educational Processor MIC1 - Processor 8088

March 2018 - July 2018
(5 months)

Academic Tutor Computer Architecture

University of Cagliari, Science Faculty, Degree course in Computer Science, Cagliari (Italy)

Design of Combinational Circuits - Microarchitecture - INM Language - Educational Processor MIC1 - Processor 8088

March 2017 - July 2017
(5 months)

Academic Tutor Computer Architecture

University of Cagliari, Science Faculty, Degree course in Computer Science, Cagliari (Italy)

Design of Combinational Circuits - Microarchitecture - JVM Language - Educational Processor MIC1 - Processor 8088

June 2016 - September 2016
(5 months)

Research Intern at Philips Research

Philips Research, Data Science Department, High Tech Campus 36, Eindhoven (The Netherlands)

The topic of my work was to explore the IBM Watson tools to support Healthcare activities.

March 2016 - July 2016
(5 months)

Academic Tutor Computer Architecture

University of Cagliari, Science Faculty, Degree course in Computer Science, Cagliari (Italy)

Design of Combinational Circuits - Microarchitecture - INM Language - Educational Processor MIC1 - Processor 8088

EDUCATION AND TRAINING

October 2016 – In progress
(at the end 3 years)
Thesis submission September 2019
Defence scheduled November 2019



Ph.D. candidate in Computer Science
University of Cagliari, Mathematics and Computer Science Department, Cagliari (Italy)
Research fields: Knowledge Graphs, Machine Learning, Deep Learning, Natural Language Processing, Sentiment Analysis.
Supervisor: Prof Diego Reforgiato Recupero
Thesis: Knowledge Extraction from Textual Resources through Semantic Web Tools and Advanced Machine Learning Algorithms for Applications in Various Domains.
International research and collaboration:



Visiting Student from 05/09/17 to 02/12/2017 of the Professor Delmis Shasha at the Center for Data Science, New York University, New York City, USA



Visiting Student from 10/09/2018 to 10/12/2018 of the Professor Emico Molta at the Knowledge Media Institute (K.Mi)- Open University, Milton Keynes, UK



Visiting Student from 14/01/2019 to 05/04/2019 of the Professor Davide Buscalci at the Laboratoire d'Informatique Pmis Nord- University Pmis 13, Paris, FR

September 2014 - September 2016
(2 years)



Computer Science M.Sc. Degree
University of Cagliari, Science faculty, Cagliari (Italy)

Image Processing - Formal Methods - Security Foundation - Algorithms and Data Structures - Biometrics and Security- Data Mining- Network Computation - Computer Architecture - Operating Systems - Networking Architecture - Computational Mathematics - Database - Operative Research

Final score: 110/110 Date: 22 September 2016 Age: 24

Thesis: A Complex Network approach to evaluate the "Natura 2000" network. Supervisor: Prof Gianni Fenu

September 2014 - January 2015
(5 months)

CCNA Exploration Certification
Cisco Networking Academy (www.netacad.com)

CCNA 1 - Network Fundamentals
CCNA 2 - Routing Protocols and Concepts

September 2011 - July 2014
(3 years)



Computer Science B.Sc. Degree
University of Cagliari, Science faculty, Cagliari (Italy)

Computer Science Foundation - Operating Systems - Relational Database - Computer Networks - Imperative Programming - Object Oriented Programming - Functional Programming - Algorithms - Programming languages - Data Structures - Automata - Human Computer Interaction - Software Engineering - Computer Architecture - Statistics - Mathematical Analysis - Traineeship (350 hours)

Final score: 110/110 (cum laude) Date: 25 July 2014 Age: 22

Thesis: Convergence of processes and services on mobile devices. Supervisor: Prof Gianni Fenu

September 2006 - July 2011
(5 years)



Computer Science Diploma
ITIS Othoca, Oristano (Italy)

Programming Foundations - Information Transmission - Analogical Electronics - Digital Electronics - Statistics - Database - Mathematics - English Language

Final score: 100/100 Date: 04 July 2011 Age: 19

FUTURE PERSPECTIVES

Plans for further studies: Looking for a post-doc position in Europe.
Availability to travel: yes **Availability to move abroad:** yes

PERSONAL SKILLS

Mother tongue
 Other languages

Italian

UNDERSTANDING		SPEAKING		WRITTEN PRODUCTION
Listening	Reading	Spoken interaction	Spoken production	
B2	B2	B2	B2	B2
Certificate of B2 level from Linguistic Centre of the University of Cagliari				

Communication skills

I acquired good communication skills during my experience as tutor and during presentations of academic projects.

Social ability

Good social skills obtained during my school and university career, during the training period which included a team work, during my teaching experience as tutor. Moreover, I have had some international experiences where I worked with people coming from all over the world.

Management skills

I acquired good organization skills in planning and execution of projects during various international collaborations in my research experience.

Computer skills

- **Programming skills:** C (*high*), C++ (*high*), Java (*excellent*), OCaml (*basis*), R (*basis*), Python (*excellent*), Proficiency with VCSs. (SVN & GIT), Knowledge of NetBeans, Eclipse, AndroidStudio, and PyCharm IDEs.
- **Web Programming:** JSP (*high*), JSP (*good*), Javascript (*basis*)
- **Markup Languages:** HTML, CSS, XML, LaTeX
- **Database:** SQL, MySQLDBMS
- **Operating System:** Windows (7, 8, 10) (*good*), Linux (*high*), IOS (*high*)
- **Browser:** Firefox, Internet Explorer, Google Chrome
- **Machine Learning:** Scikit-learn, Keras
- **Natural Language Processing:** Gensim, NLTK, Spacy, StanfordCoreNLP
- **Complex Networks:** Networkx, iGraph
- **Data Science tools:** Pandas, python Notebooks
- **Semantic web tools:** Framester, Fred, IBM Watson, Semafor, Pikes
- **Others:** suite Office and similar, MatLab, pgAdmin, Oracle VM Virtual Box

AWARDS

- **Winner of a mobility grant 2019 sponsored by Labex EFL** to stay 3 months at the University of Paris 13 (France)
- **Winner of a PlaceDoc grant 2018 sponsored by the University of Cagliari** to stay 3 months at the Knowledge Media Institute - Open University (UK)
- **Winner of a GlobusDoc grant 2017 sponsored by the University of Cagliari** to stay 3 months at the New York University (USA)
- **Best poster award at ESWC-14 conference** with Leveraging Cognitive Computing for Multi-Class Classification of E-Learning Videos (see publications for more details)
- **Regional Merit Scholarship - Academic Year 2012-2013** Autonomous Region of Sardinia
- **Regional Merit Scholarship - Academic Year 2011-2012** Autonomous Region of Sardinia

PUBUCATIONS /
RESEARCH ACTIVITY

- Chapters/Books**
- Dessì, D., Dragoni, M., Fenu, G., Mruras, M., & Reforgiato Recupero, D. (2019). Deep Learning Adaptation with Word Embeddings for Sentiment Analysis on Online Course Reviews. Accepted in: *Deep learning based approaches for sentiment analysis book*
- Dessì, D., Reforgiato Recupero, D., Fenu, G., & Consoli, S. (2018). A Recommender System of Medical Reports Leveraging Cognitive Computing and Frame Semantics. In *Jvlachine Learning Paradigms* (pp. 7-30).
- Conferences / Workshops**
- Reforgiato Recupero, D., Dessì, D., & Concas E. (2019). A Flexible and Scalable Architecture for Human-Robot Interaction. Accepted at: *European Conference on Ambient Intelligence 2019*.
- Buscaldi, D., Dessì, D., Motta, E., Osborne, F., & Reforgiato Recupero, D. (2019). Mining Scholarly Data for Fine-Grained Knowledge Graph Construction. In *CEUR Workshop Proceedings* (Vol. 2377, pp. 21-30).
- Dessì, D., Dragoni, M., Fenu, G., Marras, M., & Reforgiato Recupero, D. (2018). Analisi Emozionale di recensioni di corsi online basata su Deep Learning e Word Embeddings. In *Coriferenza GARR 2018*.
- Dessì, D., Fenu, G., Marras, M., & Reforgiato Recupero, D. (2018). COCO: Semantic-Enriched Collection of Online Courses at Scale with Experimental Use Cases. In *World Conference on Information Systems and Technologies* (pp. 1386-1396).
- Dessì, D., Reforgiato Recupero, D., Fenu, G., & Consoli, S. (2017). Exploiting Cognitive Computing and Frame Semantic Features for Biomedical Document Clustering. *SeWeBMeDA@ESWC 14th*: (pp. 20-34).
- Fenu, G., Pau, P. L., & Dessì, D. (2016). Modeling and Extending Ecological Networks Using Land Similarity. In *International Workshop on Complex Networks and their Applications* (pp. 709-718). Springer.
- Journals**
- Dessì D., Reforgiato Recupero, D. (2019). LexTex: A Novel Framework to Automatically Assign Scores to Wordnet Word Senses in Domain Specific Categories. Submitted to: *Knowledge and Information Systems* journal. Status: second review round.
- Dessì, D., Fenu, G., Marras, M., & Reforgiato Recupero, D. (2019). Bridging learning analytics and Cognitive Computing for Big Data classification in micro-learning video collections. *Computers in Human Behavior*, 92, (pp. 468-477).
- Dessì, D., Cirrone, J., Reforgiato Recupero, D., & Shasha, D. (2018). SuperNoder: a tool to discover over-represented modular structures in networks. *BMC Bioinformatics*, 19, 318.
- Fenu, G., Pau, P. L., & Dessì, D. (2017). "Functional models and extending strategies for ecological networks." *Applied Network Science* 2.1 :10
- Posters**
- Bardaro G., Dessì D., Motta E., Osborne F., & Reforgiato Recupero, D. (2019). Parsing Natural Language Sentences into Robot Actions. Accepted at: ISWC 18th.
- Buscaldi, D., Dessì, D., Motta, E., Osborne, F., & Reforgiato Recupero, D. (2019). Mining Scholarly Publications for Scientific Knowledge Graph Construction. Presented at: *ESWC 16th* conference.
- Dessì, D., Dragoni, M., Fenu, G., Mruras, M., & Reforgiato Recupero, D. (2019). Evaluating neural word embeddings created from online course reviews for sentiment analysis. In *Proceedings of the 34th ACM/SIGAPP Symposium on Applied Computing* (pp. 2124-2127). ACM.
- Dessì, D., Fenu, G., Mruras, M. & Reforgiato Recupero, D. (2017). Leveraging Cognitive Computing for Multi-Class Classification of E-Learning Videos. *ESWC 14th* (pp. 21-25). Springer.
- Technical Reports**
- Dessì D., Fenu, G., Reforgiato Recupero, D., & Consoli S. (2017). Exploration of IBM Watson for Healthcare Applications, Philips Research Europe Technical Note, PR-TN 2017/00115, Eindhoven, The Netherlands.
- Reviewing Activity**
- I have been reviewer for:
- Semantics 2019 conference.
 - Clic-it 2019 conference.
 - ACM SAC 2019 Knowledge and Language Processing track.
 - DL4KG workshop at the ESWC 16th 2019 conference.
 - EMSASW2018 workshop at the ESCW 15th 2018 conference.
- Participation in Conferences**
- SAC 2019**, (8-12) April 2019, Limassol, Cyprus, speaker
- European Data Forum**, (29 - 30) June 2016, Eindhoven (The Netherlands), participant

Memberships

HRI@Lab Unica (<http://hri.unica.it/>)**SKM³** (<http://skm.kmi.open.ac.uk/#people>)

ADDITIONAL INFORMATION

Driving license

Italian driving licence, category B

Professional references

Diego Reforgiato Recupero, Associate Professor at University of Cagliari, diego.reforgiato@unica.it**Sergio Consoli**, Scientific Project Officer at the JRC (Ispra), sergio.consoli@ec.europa.eu**Dennis Shasha**, Full Professor at the New York University, shasha@cims.nyu.edu**Enrico Motta**, Full Professor at the K.Mi-The Open University, enrico.motta@open.ac.uk

I declare that the contained information in this Curriculum Vitae are true.