Alessandro Suglia

Education

2018–2021 (expected) **PhD**, *Centre for Doctoral Training in the Edinburgh Centre for Robotics*, Supervisors: Prof. Oliver Lemon, Dr. Ioannis Konstas, Topic: Situated Grounded Language Learning through Interaction.
PhD programme in Robotics and Autonomous Systems

2017–2018 **MSc by Research**, *Centre for Doctoral Training at the Edinburgh Centre for Robotics*, Degree "Robotics and Autonomous Systems", *Full marks with distinction*.
Thesis: "Dialogue Attention Buffer: A Neural Memory Module for Task-based Conversational Systems"

2014–2017 **Master Degree**, *University of Bari, Aldo Moro*, Degree in Computer Science – "Knowledge Engineering and Machine Intelligence", *110/110 cum laude*.
Thesis: "Converse-Et-Impera: a Conversational Content-based Recommender System based on Hierarchical Deep Reinforcement Learning"

2011–2014 **Bachelor Degree**, *University of Bari, Aldo Moro*, Degree in "Computer Science", *110/110 cum laude*.
Thesis: "Content-based Recommender Systems based on Linked Open Data"

Honours

2013–2014 **Best graduated student award**, *University of Bari, Aldo Moro, Italy*.

Publications

Stefano Ferilli et al. "A Similarity-Based Abstract Argumentation Approach to Extractive Text Summarization". In: *Conference of the Italian Association for Artificial Intelligence*. Springer. 2017, pp. 87–100.

Claudio Greco et al. "Converse-Et-Impera: Exploiting Deep Learning and Hierarchical Reinforcement Learning for Conversational Recommender Systems". In: *Conference of the Italian Association for Artificial Intelligence*. Springer. 2017, pp. 372–386.

Claudio Greco et al. "Iterative Multi-document Neural Attention for Multiple Answer Prediction". In: *Proceedings of the AI*IA Workshop on Deep Understanding and Reasoning: A Challenge for Next-generation Intelligent Agents 2016 co-located with 15th International Conference of the Italian Association for Artificial Intelligence (AIxIA 2016), Genova, Italy, November 28th, 2016.* 2016.

Alessandro Suglia et al. "A Deep Architecture for Content-based Recommendations Exploiting Recurrent Neural Networks". In: *Proceedings of the 25th Conference on User Modeling, Adaptation and Personalization, UMAP 2017, Bratislava, Slovakia, July 09 - 12, 2017*. 2017.

Alessandro Suglia et al. "An Automatic Procedure for Generating Datasets for Conversational Recommender Systems". In: *Dynamic Search for Complex Tasks - Working Notes of CLEF 2017 - Conference and Labs of the Evaluation Forum, Dublin, Ireland, September 11-14, 2017, Proceedings*. 2017.

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Experience

Work

Plusimple S.r.l Design and implementation using Apache Solr of a Context-aware Search engine able to understand the user query intent and to reformulate the query according to intent-specific details and user-specific information collected during the platform usage time.

Work period: Apr. '17 - Sept. '17

University projects

Amazon Alexa Prize 2018 Design and implementation of several components for the open-domain conversational agent "Alana" classified 3rd in the Alexa Prize Challenge 2018. I was responsible of the main architecture of the socialbot as well as the Natural Language Understanding pipeline and several retrieval-based bots.

Reference: `https://developer.amazon.com/alexaprize/2018/proceedings`

IMNAMAP Implementation in *TensorFlow* of the paper "Iterative Multi-document Neural Attention for Multiple Answer Prediction" which describes a *Deep Learning* model able to generate multiple answers to a given question extracting relevant evidences from multiple documents.

Code: `https://github.com/nlp-deepqa/imnamap`

AMAR Implementation in *Torch* of the paper "Ask Me Any Rating: A Content-based Recommender System based on Recurrent Neural Networks" which describes a *Deep Learning* architecture able to generate suggestions according to the user preferences.

Code: `https://github.com/nlp-deepcbrs/amar`

Personal projects and open source contributions

ParlAI Implementation of a custom world based on the bAbI plus dataset (`http://aclweb.org/anthology/D17-1235`) and integration in the Facebook ParlAI framework for dialogue systems.

Code: `https://github.com/facebookresearch/ParlAI/pull/319`

RiVal Contributed to the *RiVal* project by generalizing the classes used to load a dataset and by enhancing the capabilities of the classes used to split a dataset.

Pull requests: `https://goo.gl/WHAOFy`

Stack Overflow Contributed to the *Stack Overflow* community by providing support to users on questions related mainly to *Java* and *Python*.

Personal profile: `http://stackoverflow.com/users/3531912/alessandro-suglia`

Personal skills and competences

Technical skills

Programming languages (preferred)	Java, Python	Programming languages (known)	C, C++, Go, Haskell, Lua
Machine Learning libraries	scikit-learn, TensorFlow, Torch, PyTorch, Weka	Semantic Web technologies	OWL, RDF, SPARQL
Database Management Systems	MySQL, MongoDB, PostgreSQL, DynamoDB		