#### Personal information

Name / Surname

Valeria, Ruscio

# **Education and training**

Title of qualification awarded

Principal subjects

Thesis title Institution

Dates

Expected date of defence

Location

Ph.D.

Probing for encoded knowledge in attention-based Large Language Model

"Analyzing Large Language Models: Bridging Linguistics and Applied Mathematics"

Sapienza University of Rome

Oct. 2020 - 08 March 2024

March 2024

Rome, Italy

Role

Researcher (assegno di ricerca)

Principal subjects

Institution

Probing for encoded knowledge in attention-based Large Language Model

Sapienza University of Rome, Department of Department of Computer, Control and

Management Engineering

Dates

Location

Apr. 2023 - Oct. 2023

Rome, Italy

Role

Visiting Ph.D. student

Principal subjects

Studying attention-based Large Language Model

Institution **KAIST** 

**Dates** 

Apr. 2022 - Oct. 2022

Location

Daejeon, South Korea

Title of qualification awarded

Master's Degree

Principal subjects

Asian Languages and Linguistics, Korean Language curriculum

Institutions

Hanyang University and Sapienza University of Rome

**Dates** 

Dec. 2016 - Gen. 2019

Degree type

Double degree (Both from South Korean and Italy)

Location Rome, Italy and Seoul, South Korea

Title of qualification awarded

Bachelor's Degree

Principal subjects

Asian Languages and Linguistics, Korean Language curriculum

Institution **Dates**  Sapienza University of Rome

Sep. 2013 - Dec. 2016

Location

Rome, Italy

#### **Publications**

**Paper** 

"Attention-likelihood relationship in transformers" at ICLR 2023

Paper (journal)

"Synonymy in Korean Lexicon through the lens of vector semantics" in "Percorsi in Civiltà dell'Asia e dell'Africa II: Quaderni di studi dottorali alla Sapienza"

## **Scholarships**

Name of the Scholarship Principal subjects Granting Institution Hosting Institution

> Dates Location

International mobility for Ph.D. students Studying attention-based Large Language Model Sapienza University of Rome KAIST

Apr. 2022 - Oct. 2022 Daejeon, South Korea

### **Roles at Conferencs**

Outstanding Reviewer

Award

at "ECIR 2024", European Conference on Information Retrieval

Program Committee

at "SIGIR 2024", Special Interest Group on Information Retrieval

**Program Committee** 

at "UniReps: Workshop Unifying Representations in Neural Model" NeurIPS, New Orleans (USA) December 15th 2023

**Panelist** 

Talk: "Analyzing semantics in Korean language through Conterfactual Question Answering" at "31st AKSE conference" (Association for Korean Studies in Europe) held in Copenhagen in June 2023

Organizing Chair

Conference: "Squid Game and the key factors of Hallyu: dissecting the socio-cultural impact of K-Dramas in Italy" held at Sapienza university of Rome, Italy in Apr. 2022

**Invited Speaker** 

Talk: "Synonymy in Korean Lexicon through the lens of vector semantics" at 1st KSYS (Korean Studies Young Scholars) Workshop held in Venice, Italy in Nov. 2021

**Invited Speaker** 

Talk: "Token semantic relevance through attention: a Question Answering case study" at 2st KSYS (Korean Studies Young Scholars) Workshop held in Napoli, Italy in Nov. 2022

## Work experience

Company
Dates
Occupation or position held
Main activities and
responsibilities

Babelscape s.r.l. Nov. 2019 - Gen. 2022 Computationa Linguists

- Providing morphological annotations in Korean, Italian and English;
- Managing a team of linguists working on different annotation tasks;
- Working on knowledge bases;
- Experience in nlp pipeline-related tasks (like tokenization, compounding, multiworld expansion, named entity recognition, pos tagging and such) especially when the focus is some Asian languages (as Korean, Chinese, Japanese, Indonesian, Thai)

Company Dates

Occupation or position held

Main activities and

responsibilities

Personal skills and competences

Mother tongue Other language(s) Self-assessment European level(\*)

> English Korean

World link translation

Dec. 2017 - Oct. 2019

Translator

translating medical, legal, and scientific documents from English into Italian, from Italian into English, from Korean into English and from Korean into Italian.

# Italian

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C1	C2	C1	C1	C2
B2	B2	B1	B1	B2

<sup>(\*)</sup> Common European Framework of Reference (CEF) level

Roma (RM), April 3, 2024		
Place and date	-	Name Surname