



# Samuel García

Doctoral Researcher

@ samuel.garcia@tum.de

## Social Networks —



LinkedIn



GitHub



Web (projects and publications)

## Languages —

- Spanish (native)
- English (CEFR C2)
- French (elementary proficiency)

## Technologies —

</> Main programming languages

- Python
- C/C++
- Java
- Rust
- Go

☰ Familiarity with tools

- Use of Large Language Models
  - BERT, generative LLMs...
  - Huggingface pipelines, Flair...
- Machine Learning frameworks
  - pyTorch, scikit-learn...
- Data Science and math tools
  - NumPy, Matplotlib, Pandas...
- NLP tools
  - spaCy, NLTK...
- Semantic Web tools
  - Knowledge Graphs, Jena, HDT...
- Information Retrieval and Big Data
  - Elasticsearch, Lucene, Galago...
  - Use of SQL and SPARQL

## About me

Hello! My name is Samuel, and I am currently a doctoral student at Technische Universität München (TUM). I previously studied an BSc. degree in Computer Science from Universidad de Zaragoza and an MSc. degree in Intelligent Interactive Systems at Universitat Pompeu Fabra.

I am very passionate about every aspect of Computer Science, and especially the Semantic Web, Natural Language Processing and Artificial Intelligence fields of study, where I am focusing my research career into.

## Work Experience

- |           |   |                          |
|-----------|---|--------------------------|
| 2023-2024 | <b>Research Internship</b><br>Internship at the Joint Research Centre, in collaboration with Universitat Pompeu Fabra for the 'Reasoning with language and Knowledge Graphs' Master's thesis (Research and development of a system that unifies Large Language Models and Knowledge Graphs for the processing of scientific literature and technical reports from the European Commission). | European Commission      |
| 2022-2023 | <b>Research Collaboration grant</b><br>Research internship at the Distributed Information Systems group (SID) at Universidad de Zaragoza, working on research projects about Semantic and Knowledge Graph-oriented Information Retrieval, Natural Language Processing and Large Language Models.  | Universidad de Zaragoza  |
| 2022-2022 | <b>Research Internship</b><br>Short research internship at the COSMOS group at Universidad de Zaragoza, working on the design, refactoring, validation and deployment of a Petri Net-based distributed simulation engine.   | Universidad de Zaragoza  |
| 2017-2018 | <b>Technical Support Analyst</b><br>Member of EMEA's technical support team, in charge of the hybrid cloud infrastructure by offering support server-side (Active Directory, IIS, Microsoft SQL Server) and on the application level (commercial ERP systems).  | Epicor Software Slovakia |

## Education

- |           |  |                                |
|-----------|--|--------------------------------|
| 2024-     | <b>Doctoral Researcher</b><br>Doctoral Student on the <i>Atomic-Scale Understanding and Design of Multifunctional Surfaces</i> project under the supervision of Maribel Acosta. Focusing on Knowledge Graph construction and querying. | Technische Universität München |
| 2023-2024 | <b>MSc. in Intelligent Interactive Systems</b><br>Data Science, Artificial Intelligence and NLP.   | Universitat Pompeu Fabra       |
| 2019-2023 | <b>BSc. in Computer Science</b><br>Specialization in Computing.  | Universidad de Zaragoza        |
| 2015-2017 | <b>Computer Network Systems Management</b><br>Higher Technician degree.  | CPIFP Los Enlaces              |

## Main interests

- ☰ Semantic Web
- ☰ Natural Language Processing
- ☰ Artificial Intelligence

## Publications

Coming soon!

## Other qualifications and activities

2023	<b>Language Models course</b> Taught by Jordi Bernad, from the <a href="#">SID</a> group.	<a href="#">Universidad de Zaragoza</a>
2020	<b>Natural Language Processing course</b> Taught by Jorge Gracia, from the <a href="#">SID</a> group.	<a href="#">Universidad de Zaragoza</a>
2016	<b>Aragón skills Competition</b> Representing <a href="#">CPIFP Los Enlaces</a> in the Network Support category.	<a href="#">Aragón Skills</a>