

EDUCATION

- **Sapienza University of Rome** Rome, Italy
Postdoctoral Research Fellow in Engineering in Computer Science December 2022 - Current
Department of Engineering in Computer Science
- **Sapienza University of Rome** Rome, Italy
Ph.D. in Deep Learning and Natural Language Processing October 2019 - October 2022
Department of Computer Science, XXXV Ph.D. cycle
- **Sapienza University of Rome** Rome, Italy
Master's Degree in Engineering in Computer Science October 2016 - January 2019
110/110 Cum Laude
- **Sapienza University of Rome** Rome, Italy
Engineering Honors Programme March 2018 - December 2018
Completed Successfully
- **Roma Tre University** Rome, Italy
Bachelor's degree in Engineering in Computer Science October 2013 - July 2016
110/110 Cum Laude

SELECTED PUBLICATIONS

(Full list of publications on the website)

- **2022: E. Barba**, L. Procopio, and R. Navigli. 2022. **ExtEnD: Extractive Entity Disambiguation**. In Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 2478–2488, Dublin, Ireland. Association for Computational Linguistics.
GRIN Rating: A++
- **2022: S. Pepe, E. Barba**, R. Blloshmi, and R. Navigli (2022). **STEPS: Semantic Typing of Event Processes with a Sequence-to-Sequence Approach**. Proceedings of the AAAI Conference on Artificial Intelligence, 36(10), 11156-11164.
GRIN Rating: A++
- **2021: E. Barba**, L. Procopio, and R. Navigli. **ConSeC: Word sense disambiguation as continuous sense comprehension**. In Proceedings of the 2021 Conference on Empirical Methods in Natural Language Processing, pages 1492–1503, Online and Punta Cana, Dominican Republic, Nov. 2021. Association for Computational Linguistics.
GRIN Rating: A+
- **2021: E. Barba**, L. Procopio, C. Lacerra, T. Pasini, and R. Navigli. **Exemplification modeling: Can you give me an example, please?** In Z.-H. Zhou, editor, Proceedings of the Thirtieth International Joint Conference on Artificial Intelligence, IJCAI-21, pages 3779–3785. International Joint Conferences on Artificial Intelligence Organization, 8 2021. Main Track.
GRIN Rating: A++
- **2021: E. Barba**, T. Pasini, and R. Navigli. **ESC: Redesigning WSD with extractive sense comprehension**. In Proceedings of the 2021 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, pages 4661–4672, Online, June 2021. Association for Computational Linguistics.
GRIN Rating: A+
- **2021: E. Barba**, L. Procopio, N. Campolungo, T. Pasini, and R. Navigli. **Mulan: Multilingual label propagation for word sense disambiguation**. In C. Bessiere, editor, Proceedings of the Twenty-Ninth International Joint Conference on Artificial Intelligence, IJCAI-20, pages 3837–3844. International Joint Conferences on Artificial Intelligence Organization, 7 2020. Main track.
GRIN Rating: A++

TEACHING ACTIVITIES

- **Master Thesis Supervision**
Co-supervised with prof. Roberto Navigli 4 Master's thesis on Natural Language Processing. 2020 - 2022
- **Teaching Assistant**
Natural Language Processing MSc course: tutorial sessions, homeworks, and student assessment. 2020 - 2022

ACADEMIC ACTIVITIES

- **Tutorial Presenter**
the Asia-Pacific Chapter of the Association for Computational Linguistics 2022.
- **Program Committee**
ACL 2020, 2021; IJCAI 2020, 2021; AAAI 2021; EMNLP 2020, 2021; NAACL 2020, 2021.

WORK EXPERIENCE

- **Babelscape - S.r.l.**
Natural Language Processing Engineer Sep 2018 - June 2019
 - **Named Entity Recognition:** Design and implementation of a module for automatic Named Entity Recognition (NER) in Wikipedia pages. Aim: producing silver-standard datasets for training NER classifiers in multiple languages.
 - **Keywords Extraction:** Development of Extraggio 2.0, a semantic-aware concepts and named entities extraction tool. Main contributions: Designing and implementing a new keyword extraction algorithm based on TextRank and proposing a novel word embedding model mainly focused on explicit components.
- **I-node S.r.l.**
Software Engineer Feb 2016 - June 2016
 - **Machine Learning:** Development of a face detection module based on OpenCV: model training and evaluation.
 - **Backend Development:** Machine Learning modules bindings to a Java Enterprise Edition environment.

HONORS AND AWARDS

- Honours programme successful completion scholarship. - (Sapienza, December 2018)
- Wanted the Best Scholarship for academic merits. - (Sapienza, October 2016)
- Collaboration Scholarship for academic merits - (Roma Tre, April 2014)

LANGUAGES

- **Italian:** Mother Tongue
- **English:** Fluent

TECHNICAL SKILLS

- **Programming:** Python, Kotlin, Java, Bash, C, L^AT_EX
- **Frameworks:** PyTorch, PyTorch Lightning, Hydra, fairseq, transformers

THESES

- **Ph.D.:** Descriptive Modeling: Capturing Semantic in Neural Models via Natural Language Descriptions. (Ongoing)
- **Master's Degree:** Correlation between gene expression and breast cancer insurgence exploiting machine learning.
- **Bachelor's Degree:** OpenCV based Face Detection module in a Java Enterprise Edition environment.

Autorizzo il trattamento dei miei dati personali presenti nel CV ai sensi dell'art. 13 d. lgs. 30 giugno 2003 n. 196 - "Codice in materia di protezione dei dati personali" e dell'art. 13 GDPR 679/16 - "Regolamento europeo sulla protezione dei dati personali".