



RAZIEH ELIN EHSANI

PhD in Natural Language Processing

Senior AI Scientist

Since 2018 I have been working on different AI projects in two different companies. I worked on small, average, and large scale projects. Visiting customers, listening to their requirements and making a solution proposal for them were one of my main responsibilities. I also have taken the project management role in large scale projects, leading an international team. In all of these projects, I performed the machine learning developer role as well. AI projects that I have been working on include NLP projects such as entity extraction from the texts as well as entity extraction from scanned documents. I have given speeches at international conferences and webinars as well. I have a strong track record in NLP research with several academic publications in top outlets like ACL and EMNLP.

Technical Skills

- **Machine learning:**
Natural Language Processing, Pattern Recognition, Deep Learning, Computer Vision, Data Mining, Signal Processing, Human-Computer Interaction, Design and Analysis of Algorithms, Data Structures, Object-Oriented Programming
- **Programming languages:**
Python, Java, R, C/C++, C#, Matlab
- **Technologies, frameworks and libraries:**
PyTorch, Tensorflow, Transformers, NLTK, Turku Dependency parser, Stanford NLP toolkit, CRFsuite, CRF++, Amazon SageMaker, AWS, Docker, Git, Codecommit, Azure
- **Other:**
Linux

Work Experience

Silo AI, Helsinki, Finland, 8/2021–Present

Senior AI Scientist

Developing machine learning solutions for clients, as well as identifying AI opportunities and creating AI development roadmaps through design sprints and other workshops.

Digital Workforce services LTD, Helsinki, Finland, 2019–2021
Lead data scientist

Digital Workforce services LTD, Helsinki, Finland, 2018–2019
Data scientist

University of Helsinki, Helsinki, Finland, 2018
Postdoctoral researcher

Işık University, Istanbul, Turkey, 2015–2018
Researcher
In Scientific and Technological Research Council of Turkey

Işık University, Istanbul, Turkey, 2014–2017
Researcher
In Scientific Research Project

Işık University, Istanbul, Turkey, 2013–2018
Teaching assistant

Koç University, Istanbul, Turkey
Researcher, 2012–2013
In Bologna Translation Service which was funded by Competitiveness and
Innovation framework Programme (CIP)

Education

Işık University, Istanbul, Turkey, 2018
Doctor of Philosophy in Computer Engineering

Istanbul Technical University, Istanbul, Turkey, 2012
Master of Science in Computer Engineering

Publications

“Çoklu Koşullu Rassal Alanlar Kullanarak Türkçe Biçimbilimsel Belirsizlik
Giderme”, Fen Bilimleri Enstitüsü, R Ehsani

“Clinical Data Classification using Conditional Random Fields and Neural
Parsing for Morphologically Rich Languages”, Proceedings of the 2nd Clinical
Natural Language Processing Workshop, R Ehsani, T Niemi, G Khullar, T Leivo

“A fst description of noun and verb morphology of azarbaijani turkish”, Proceedings of the 13th International Conference on Finite State Methods and Natural Language Processing (FSMNLP 2017), R Ehsani, B Özenç, E Solak

“MorAz An open-source morphological analyzer for Azerbaijani Turkish: An open-source morphological analyzer for Azerbaijani Turkish”, The Conference on Empirical Methods in Natural Language Processing Proceedings of System Demonstrations, October 31–November 4, 2018 Brussels, Belgium, B Özenç, R Ehsani, E Solak

“Constructing a Turkish constituency parse treebank”, Information Sciences and Systems 2015, OT Yıldız, E Solak, Ş Çandır, R Ehsani, O Görgün

“English-Turkish parallel treebank with morphological annotations and its use in tree-based smt”, SciTePress, O Görgün, OT Yıldız, E Solak, R Ehsani

“Disambiguating main pos tags for turkish”, Proceedings of the 24th Conference on Computational Linguistics and Speech Processing (ROCLING 2012), R Ehsani, ME Alper, G Eryiğit, E Adali

“KeNet: A Comprehensive Turkish Wordnet And Its Applications in text Clustering”, Ph.D. Thesis, 2018, Isik University, Istanbul, Turkey

“Constructing a WordNet for Turkish Using Manual and Automatic Annotation”, ACM Transactions on Asian and Low-Resource Language Information Processing 2018, Raziéh Ehsani, Ercan Solak, Olcay Taner Yıldız

An FST Description of Noun and Verb Morphology of Azerbaijani Turkish, FSMNLP 2017, Raziéh Ehsani, Berke Ozenc, Ercan Solak

“Hypernym Extraction From Wikipedia and Wiktionary ” SİU 2017, Emre Şaşmaz, Raziéh Ehsani, Olcay Taner Yıldız

"Hybrid chunking for Turkish combining morphological and semantic features", CICLing 2017, Raziéh Ehsani, Ercan Solak, Olcay Taner Yıldız

“Initial Efforts in Creating a Persian-English Parallel TreeBank”, CICLing2017, Raziéh Ehsani, Olcay Taner Yıldız

"An English-Turkish Parallel Treebank with Morphological Annotations a Tree-based SMT", ICPRAM 2016, Olcay Taner Yıldız, Ercan Solak, Onur Görgün, Raziéh Ehsani

“Chunking in Turkish with Conditional Random Fields", CICLing 2015, Olcay Taner Yıldız, Ercan Solak, Raziéh Ehsani, Onur Görgün

“Attachment errors of nouns after possessor clitic”, Research in Computing Science 90, 173-181, 2015 Olcay Taner Yıldız, Ercan Solak, Raziéh Ehsani, Onur Görgün

“Constructing a Turkish-English Parallel Treebank”, ACL 2014, Olcay Taner Yıldız, Ercan Solak, Onur Görgün, Raziéh Ehsani

"Turkish Morphological Disambiguation using multiple Conditional Random Field MSc, MSc thesis. 2013, Istanbul Technical University, Istanbul, Turkey

"Turkish POS-Tagging using conditional random fields", ROCLING 2012, Razieh Ehsani, Ege Alper, Gülşen Eryiğit, Eşref Adalı

Languages

Azerbaijani — native

Persian — native

Turkish — native

English — full professional proficiency

Arabic — limited working proficiency

Finnish — elementary proficiency

Other

LinkedIn: <https://www.linkedin.com/in/raziieh-elin-ehsani-997a5b35/>

Google Scholar:

https://scholar.google.com/citations?hl=fi&user=rd_LBw8AAAAJ

Teaching Experience:

Instructor:

- Design of Modern Algorithms (Graduate level) KHAZAR UNIVERSITY School of Engineering and Applied Science (2016, Baku)
- Programming Languages (Graduate level) KHAZAR UNIVERSITY School of Engineering and Applied Science (2016, Baku)
- Computer Organization (Undergraduate level) KHAZAR UNIVERSITY School of Engineering and Applied Science (2016, Baku)
- Introduction to Programming (Undergraduate level) Isik University, (2018, Istanbul)

Teaching Assistant:

- Natural Languages Processing
- Software Engineering
- Database Systems
- Operating Systems
- Computer Organization
- System Programming
- Human-Computer Interaction
- Design and Analysis of Algorithms

- Data Structures
- Object-Oriented Programming

References:

- Adj. Prof. Anssi Yli-Jyrä
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