

Evgeniia (Genie) Razumovskaia

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I am a PhD candidate working on multilingual Natural Language Processing at the University of Cambridge. My project focuses on sample-efficient techniques to extend dialogue systems to new languages. I also worked on the topic as a research intern at Google Brain, London. My other interests include factuality and controllability of dialogue systems; during my internship at PolyAl and my Masters research at Carnegie Mellon University, I worked on improving factuality of fully generative systems and combining them with their rule-based counterparts.

EDUCATION

PhD in Computation, Cognition and Language, University of Cambridge

2020-now

Supervisor: ANNA KORHONEN. Co-supervisor: IVAN VULIĆ.

Research topic: Multilingual dialogue systems in low data regimes

I am working on extending dialogue systems to new languages in low-resource scenarios.

My work focuses on dialogue Natural Language Understanding and uses varied techniques, such as contrastive learning and weight alignment, to effectively use scarce annotated resources to improve multilingual capabilities of dialogue systems and other user-facing languages technologies, more generally.

MSc in Language Technologies, Carnegie Mellon University (GPA: 3.98; sup.: MAXINE ESKENAZI)

2018-2019

Research Topic: Hybrid Dialogue Systems Combining End-to-End Systems with Rules

Projects: End-to-end dialog systems and hybrid systems with rules; human evaluation via crowdsourcing

BSc (Hons) Cognitive Science (Informatics), University of Edinburgh (1st degree; sup.: SIMON KING)

2014-2018

Thesis title: Emotion Recognition from Speech

RESEARCH VISITS AND INTERNSHIPS

Machine Learning Research Intern, Poly AI, London UK

Jun'23 — Oct'23

Poly AI is an innovative multilingual conversational AI startup with 200+ published papers and 6 registered patents. Developed a new model for answering Frequently Asked Questions by finetuning Large Language Models, which led to 58% quality improvement in comparison to preceding model

Research Intern, Google Brain, London UK

May/22 — Sep'22

Project: In-context few-shot multilingual story generation with planning using monolingually pretrained Large Language Models

Hosts: Joshua Maynez, Shashi Narayan, Mirella Lapata, Annie Louis

Machine Learning Research Intern, Rasa, Berlin, Germany

Jan'20 — Oct'20

Rasa is a leading open-source conversational AI framework.

Conducted research for end-to-end training for Conversational AI systems while accounting for project-specific rules; developed production level code deployed as an experimental feature in Rasa's main product, Rasa Open Source.

Graduate Research Assistant, Carnegie Mellon University, Pittsburgh, USA

Sep'18 — Dec'19

Project: Text classification based on keywords and topics extracted from the Wikipedia using Gensim

Supervisor: BENJAMIN VAN DURME

Undergraduate Student Researcher, University of Edinburgh, Edinburgh, UK

Jan'16 - May 16

Project: Data Collection and Analysis of Usage of Scottish Words on Twitter during the Independence Referendum

Supervisor: SHARON GOLDWATER

PUBLICATIONS

Transfer-Free Data-Efficient Multilingual Slot Labeling

E. Razumovskaia, I. Vulić, and A. Korhonen

Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing (EMNLP 2023; to appear)

MULTI3NLU++: A Multilingual, Multi-Intent, Multi-Domain Dataset for Natural Language Understanding in Task-Oriented Dialogue

N. Moghe, E. Razumovskaia*, Guillou, L. K., Vulić, I., Korhonen, A., and Birch, A.

Findings of 61st Meeting of the Association for Computational Linguistics (ACL 2023); 5th NLP4ConvAI Workshop

Cross-Lingual Dialogue Dataset Creation via Outline-Based Generation

O. Majewska*, E. Razumovskaia*, E. M. Ponti, I. Vulić, and A. Korhonen

Transactions of Association for Computational Linguistics (TACL): 11, 139 – 156. (presented at EACL 2023)

Little Red Riding Hood Goes Around the Globe: Crosslingual Story Planning and Generation with Large Language Models

E. Razumovskaia, J. Mainez, A. Louis, M. Lapata, and S. Narayan

arXiv preprint arXiv: 2212.10471. Work done while interning at Google Research.

Data Augmentation and Learned Layer Aggregation for Improved Multilingual Language Understanding in Dialogue

E. Razumovskaia, I. Vulić, and A. Korhonen

Findings of 60th Meeting of the Association for Computational Linguistics (ACL 2022)

Natural Language Processing for Multilingual Task-Oriented Dialogue

E. Razumovskaia, G. Glavaš, O. Majewska, E. M. Ponti and I. Vulić

Proceedings of 60th Meeting of the Association for Computational Linguistics (ACL 2022): *Tutorial Abstracts*

Crossing the Conversational Chasm: A Primer on Multilingual Task-Oriented Dialogue Systems

E. Razumovskaia, G. Glavaš, O. Majewska, E. M. Ponti , A. Korhonen, and I. Vulić

Journal of Artificial Intelligence Research (JAIR): 74 (2022), 1351-1402

Incorporating Rules into End-to-End Dialog Systems

E. Razumovskaia, and M. Eskenazi

3rd Conversational AI Workshop @ NeurIPS 2019

Pretraining Methods for Dialog Context Representation Learning

S. Mehri*, E. Razumovskaia *, T. Zhao and M. Eskenazi

Proceedings of 57th Meeting of the Association for Computational Linguistics (ACL 2019)

Beyond Turing: Intelligent Agents Centered on the User

M. Eskenazi, S. Mehri, E. Razumovskaia, and T. Zhao

arXiv preprint arXiv:1901.06613

Evaluation of Difficulty and Complexity of Tasks: Case Study of International On-line Competition "Beaver" E. Yagunova, S. Pozdniakov, N. Ryzhova, E. Razumovskaia, and N. Korovkin International Journal of Engineering Education: 32(3), 1141-1150

Tasks Classification and Age Differences in Task Perception. Case Study of International On-line Competition "Beaver" E. Yagunova, S. Pozdniakov, N. Ryzhova, E. Razumovskaia, and N. Korovkin

Proceedings of International Conference on Informatics in Schools: Situation, Evolution and Perspectives (ISSEP 2015)

AWARDS AND SCHOLARSHIPS

Nominated for Google PhD Scholarship and Apple Al/ML Scholars 2023	2022
(one of 3 nominated by University of Cambridge for each Scholarship)	
Perry Travel Award, Queens' College, University of Cambridge (to attend ACL'22)	2022
Carnegie PhD Scholarship, University of Edinburgh (declined)	2020
Class Prize for Top Performance in BSc (Hons) Cognitive Science, University of Edinburgh	2018
Edinburgh Award, University of Edinburgh	2017

TEACHING

COURSES

Computational Linguistics, Supervisor, University of Cambridge	2021—2023
Deep Reinforcement Learning, Teaching Assistant, Carnegie Mellon University	2019
Introductory Applied Machine Learning, Tutor, Lab demonstrator, University of Edinburgh	2017—2018
Formal and Natural Language Processing, Tutor, University of Edinburgh	2017—2018
Reasoning and Agents, Tutor, University of Edinburgh	2016—2017

STUDENT SUPERVISOR

Undergraduate Student: Jadd Virji, University of Cambridge

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Building Dialogue Systems with Scarce Resources, Invited Talk at EdinburghNLP, University of Edinburgh	2023
Natural Language Processing for Multilingual Task-Oriented Dialogue, Tutorial at ACL'22	2022
End-to-end Dialogue Systems, <i>Talk at Rasa Summit</i>	2021

SKILLS

Prog. Languages: Python, Bash, Matlab	NLP Frameworks: HuggingFace toolkit, NLTK, Gensim
ML Frameworks: PyTorch, Tensorflow, JAX, Keras	Languages: English, Russian German, Italian, Latin, Ancient Greek

SERVICE

Center of Human-Inspired Artificial Intelligence (CHIA): Student Representative, Events on Responsible AI Reviewer: EMNLP, ACL, NLP4ConvAI workshop