

Igor Shalyminov

✉ [Email](#)  [Scholar](#)  [GitHub](#)  [Website](#)  [LinkedIn](#)

EDUCATION

Heriot-Watt University	Dec 2020
<i>Doctor of Philosophy in Computer Science (Thesis: Data-Efficient Methods for Dialogue Systems)</i>	
Yandex School of Data Analysis / Moscow Institute of Physics and Technology	June 2012
<i>Professional Retraining in Data Analysis (MSc equiv.)</i>	<i>GPA: 4.66/5.0</i>
Moscow State University of Instrument Engineering and Computer Science	June 2010
<i>Specialist (MSc equiv.) – with distinction</i>	<i>GPA: 5.0/5.0</i>

AWARDS

<i>Dialog System Technology Challenge (DSTC) 8, Fast Domain Adaptation – 1st place</i>	<i>2019</i>
<i>Amazon Alexa Prize 2018 (part of team Alana) – 3rd place prize</i>	<i>2018</i>
<i>Amazon Alexa Prize 2017 (part of team Alana) – 3rd place prize</i>	<i>2017</i>
<i>James Watt Scholarship from Heriot-Watt University</i>	<i>2016</i>
<i>Featured in Moscow's Best Graduates journal</i>	<i>2010</i>

WORK EXPERIENCE

Amazon <i>Applied Scientist</i>	2021 – Present
Dialogue summarization for AWS ContactLens; Low-resource ASR for Alexa	
Alana AI <i>Consultant (research engineering)</i>	2020 – 2021
Goal-oriented dialogue system bootstrapping	
Microsoft Research Lab – Montréal <i>Research Intern</i>	2019 – 2019
Dialog System Technology Challenge (DSTC) 8 Fast Domain Adaptation, best performing system as per human evaluation	
Microsoft Research Lab – Redmond <i>Research Intern</i>	2018 – 2018
Improving robustness of goal-oriented dialogue systems	
Yandex <i>Software Engineer</i>	2013 – 2016
Goal-oriented dialogue platform; voice analytics for call-centers; search engine for linguistic research, The Russian National Corpus	
Yandex Data Analysis School / Moscow Institute of Physics and Technology <i>Teaching Assistant</i>	2013 – 2015
Natural Language Processing course	
Microsoft Research Lab – Redmond <i>Research Intern</i>	2014 – 2014
Query optimization for a term-distributed search engine	
Yandex <i>Software Engineer Intern → Junior Software Engineer</i>	2011 – 2013
Search engine for linguistic research, The Russian National Corpus	
Intel <i>Software Engineer Intern</i>	2010 – 2010
Loop execution time analysis in the Intel C++ Compiler for Itanium architectures	
Moscow State University of Instrument Engineering and Computer Science <i>Software Engineer</i>	2006 – 2012
“Prognosis” software suite for the reliability estimation of the equipment used in nuclear energetics	

SKILLS

Languages: Python, C++, Java, Perl, L^AT_EX | **Frameworks:** PyTorch, HuggingFace, Tensorflow, scikit-learn, numpy/scipy, pandas, Lucene | **Core Technical Skills:** algorithms and data structures, classical & deep learning algorithms, natural language processing

PUBLICATIONS

1. Igor Shalyminov, Alessandro Sordoni, Adam Atkinson, and Hannes Schulz. Grtr: Generative-retrieval transformers for data-efficient dialogue domain adaptation. *IEEE ACM Trans. Audio Speech Lang. Process.*, 29:2484–2492, 2021
2. I. Shalyminov, A. Sordoni, A. Atkinson, and H. Schulz. Fast domain adaptation for goal-oriented dialogue using a hybrid generative-retrieval transformer. In *ICASSP 2020 - 2020 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, pages 8039–8043, 2020
3. Igor Shalyminov, Alessandro Sordoni, Adam Atkinson, and Hannes Schulz. Hybrid generative-retrieval transformers for dialogue domain adaptation. *Dialog State Tracking Challenge 8, DSTC8AAAI 2020*, 2020
4. Igor Shalyminov, Sungjin Lee, Arash Eshghi, and Oliver Lemon. Data-efficient goal-oriented conversation with dialogue knowledge transfer networks. In Kentaro Inui, Jing Jiang, Vincent Ng, and Xiaojun Wan, editors, *Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing, EMNLP-IJCNLP 2019, Hong Kong, China, November 3-7, 2019*, pages 1741–1751. Association for Computational Linguistics, 2019
5. Igor Shalyminov, Sungjin Lee, Arash Eshghi, and Oliver Lemon. Few-shot dialogue generation without annotated data: A transfer learning approach. In *Proceedings of the 20th Annual SIGdial Meeting on Discourse and Dialogue*, pages 32–39, Stockholm, Sweden, September 2019. Association for Computational Linguistics
6. S. Lee and I. Shalyminov. Contextual out-of-domain utterance handling with counterfeit data augmentation. In *ICASSP 2019 - 2019 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, pages 7205–7209, May 2019
7. Igor Shalyminov and Sungjin Lee. Improving robustness of neural dialog systems in a data-efficient way with turn dropout. *The Second NeurIPS Workshop on Conversational AI: “Today’s Practice and Tomorrow’s Potential”*, abs/1811.12148, 2018
8. Igor Shalyminov, Arash Eshghi, and Oliver Lemon. Multi-Task Learning for Domain-General Spoken Disfluency Detection in Dialogue Systems. In *Proceedings of the 22st Workshop on the Semantics and Pragmatics of Dialogue (SemDial 2018 - AixDial)*, 2018
9. Igor Shalyminov, Ondrej Dusek, and Oliver Lemon. Neural response ranking for social conversation: A data-efficient approach. In *Proceedings of the 2nd International Workshop on Search-Oriented Conversational AI, SCAI@EMNLP 2018, Brussels, Belgium, October 31, 2018*, pages 1–8, 2018
10. Amanda Cercas Curry, Ioannis Papaioannou, Alessandro Suglia, Shubham Agarwal, Igor Shalyminov, Xinnuo Xu, Ondrej Dusek, Arash Eshghi, Ionnis Konstas, Verena Rieser, and Oliver Lemon. Alana v2: Entertaining and informative open-domain social dialogue using ontologies and entity linking. In *2018 Alexa Prize Proceedings*, 2018
11. Igor Shalyminov, Arash Eshghi, and Oliver Lemon. Challenging Neural Dialogue Models with Natural Data: Memory Networks Fail on Incremental Phenomena. In *Proceedings of the 21st Workshop on the Semantics and Pragmatics of Dialogue (SemDial 2017 - SaarDial)*, 2017
12. Arash Eshghi, Igor Shalyminov, and Oliver Lemon. Bootstrapping incremental dialogue systems from minimal data: the generalisation power of dialogue grammars. In *Proceedings of the 2017 Conference on Empirical Methods in Natural Language Processing, EMNLP 2017, Copenhagen, Denmark, September 9-11, 2017*, pages 2220–2230, 2017
13. Arash Eshghi, Igor Shalyminov, and Oliver Lemon. Bootstrapping dialogue systems: the contribution of a semantic model of interactional dynamics. In *Proceedings of the Conference on Logic and Machine Learning in Natural Language (LaML 2017)*, 2017
14. Arash Eshghi, Igor Shalyminov, and Oliver Lemon. Interactional dynamics and the emergence of language games. *CEUR Workshop Proceedings*, 1863:17–21, 2017
15. Ioannis Papaioannou, Amanda Cercas Curry, Jose L. Part, Igor Shalyminov, Xinnuo Xu, Yanchao Yu, Ondrej Dušek, Verena Rieser, and Oliver Lemon. Alana: Social dialogue using an ensemble model and a ranker trained on user feedback. In *2017 Alexa Prize Proceedings*, 2017

PROFESSIONAL SERVICE

Program committee/reviewing: AAAI 2020–2024, EACL 2021, ICASSP 2023, ACL 2018–2023, EMNLP 2018–2023, NAACL 2021–2022, COLING 2018–2022, IEEE/ACM TASLP 2021–2022, SCAI@EMNLP 2020, SCAI@IJCAI 2019, SCAI@EMNLP 2018