Igor Shalyminov

EDUCATION

Heriot-Watt University	Dec 2020
Doctor of Philosophy in Computer Science (Thesis: Data-Efficient Methods for Dialogue Systems)	
Yandex School of Data Analysis / Moscow Institute of Physics and Technology	June 2012
Professional Retraining in Data Analysis (MSc equiv.)	GPA: 4.66/5.0
Moscow State University of Instrument Engineering and Computer Science	June 2010
$Specialist \ (MSc \ equiv.) - with \ distinction$	GPA: 5.0/5.0
Awards	
Dialog System Technology Challenge (DSTC) 8, Fast Domain Adaptation – 1st place	2019
Amazon Alexa Prize 2018 (part of team Alana) – 3rd place prize	2018
Amazon Alexa Prize 2017 (part of team Alana) – 3rd place prize	2017
James Watt Scholarship from Heriot-Watt University	2016
Featured in Moscow's Best Graduates journal	2010
Work Experience	
${f Amazon} \mid Applied \ Scientist$	2021 – Present
Dialogue summarization for AWS ContactLens; Low-resource ASR for Alexa	
Alana AI Consultant (research engineering)	2020 - 2021
Goal-oriented dialogue system bootstrapping	
Microsoft Research Lab – Montréal Research Intern	2019 - 2019
Dialog System Technology Challenge (DSTC) 8 Fast Domain Adaptation, best performing system evaluation	as per human
Microsoft Research Lab – Redmond Research Intern	2018 - 2018
Improving robustness of goal-oriented dialogue systems	
Yandex Software Engineer	2013 - 2016
Goal-oriented dialogue platform; voice analytics for call-centers; search engine for linguistic research, National Corpus	The Russian
Yandex Data Analysis School / Moscow Institute of Physics and Technology Teaching Assantarial Language Processing course	sistant 2013-201
Microsoft Research Lab — Redmond Research Intern Query optimization for a term-distributed search engine	2014 - 2014
$\mathbf{Yandex} \mid Software \ Engineer \ Intern \rightarrow Junior \ Software \ Engineer$ Search engine for linguistic research, The Russian National Corpus	2011 - 2013
Intel Software Engineer Intern Loop execution time analysis in the Intel C++ Compiler for Itanium architectures	2010 - 2010
Moscow State University of Instrument Engineering and Computer Science Software Engineering and Computer Software Engineering and Computer Software	neer 2006 – 2012

$S{\scriptstyle KILLS}$

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

- 1. Hwanjun Song, Igor Shalyminov, Hang Su, Siffi Singh, Kaisheng Yao, and Saab Mansour. Enhancing abstractiveness of summarization models through calibrated distillation. In *Findings of EMNLP 2023*, 2023
- 2. 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
- 3. 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
- 4. 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
- 5. 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
- 6. 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
- 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
- 8. 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
- 9. 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
- 10. 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
- 11. 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
- 12. 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
- 13. 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
- 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
- 15. Arash Eshghi, Igor Shalyminov, and Oliver Lemon. Interactional dynamics and the emergence of language games. CEUR Workshop Proceedings, 1863:17–21, 2017
- 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

 $\begin{array}{l} {\rm Program\ committee/reviewing:\ AAAI\ 2020-2024,\ EACL\ 2021,\ ICASSP\ 2023-2024,\ ACL\ 2018-2023,\ EMNLP\ 2018-2023,\ NAACL\ 2021-2022,\ COLING\ 2018-2022,\ IEEE/ACM\ TASLP\ 2021-2022,\ SCAI@EMNLP\ 2020,\ SCAI@IJCAI\ 2019,\ SCAI@EMNLP\ 2018} \end{array}$