# **Igor Shalyminov**

Email Scholar GitHub Website In LinkedIn

#### **EDUCATION**

EDUCATION	
Heriot-Watt University	Dec 2020
Doctor of Philosophy in Computer Science (Thesis: Data-Efficient Methods for Dialogue Systems)	I 9019
Yandex School of Data Analysis / Moscow Institute of Physics and Technology	June 2012
Professional Retraining in Data Analysis (MSc equiv.)  Moscow State University of Instrument Engineering and Computer Science	GPA: 4.66/5.0 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 – Cur.
LLM Conversational Agents @ Alexa   past: Dialogue summarization @ AWS AI Labs, Low-resource A	ASR @ 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, <b>best performing system</b> 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, T National Corpus	he Russian
Yandex Data Analysis School / Moscow Institute of Physics and Technology   Teaching Assa Natural Language Processing course	istant 2013-2015
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	2010 - 2010
Loop execution time analysis in the Intel C++ Compiler for Itanium architectures	
Moscow State University of Instrument Engineering and Computer Science   Software Engine" (Prognosis" software suite for the reliability estimation of the equipment used in nuclear energetics	$eer\ 2006-2012$

# $S{\scriptstyle KILLS}$

Languages: Python, C++, Java, Perl, IATEX | Frameworks: PyTorch, HuggingFace, Tensorflow, scikit-learn, numpy/scipy, pandas, Lucene | Core Technical Skills: algorithms and data structures, classical machine & deep learning, natural language processing, large language models (LLMs)

## Professional Service

Organizer: Dialog System Technology Challenge 12, Controllable Conversational Theme Detection track

Reviewer: Amazon Research Awards Fall 2023, Fall 2024

Program committee member:

AAAI 2020—2025, ICLR 2025, ACL 2018—2023, EMNLP 2018—2023, ICASSP 2023—2024, Main/Industry 2021—2024, COLM 2024, EACL 2021, NAACL COLING 2018—2022, IEEE/ACM TASLP 2021—2022, SCAI@EMNLP 2020, SCAI@IJCAI 2019, SCAI@EMNLP 2018

## **PUBLICATIONS**

- 1. Mahnaz Koupaee, Jake W. Vincent, Saab Mansour, Igor Shalyminov, Han He, Hwanjun Song, Raphael Shu, Jianfeng He, Yi Nian, Amy Wing-mei Wong, Kyu J. Han, and Hang Su. Faithful, unfaithful or ambiguous? multi-agent debate with initial stance for summary evaluation. In Luis Chiruzzo, Alan Ritter, and Lu Wang, editors, *Proceedings of the 2025 Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics: Human Language Technologies (Volume 1: Long Papers)*, pages 12209–12246, Albuquerque, New Mexico, April 2025. Association for Computational Linguistics
- 2. Hwanjun Song, Hang Su, Igor Shalyminov, Jason Cai, and Saab Mansour. FineSurE: Fine-grained summarization evaluation using LLMs. In Lun-Wei Ku, Andre Martins, and Vivek Srikumar, editors, *Proceedings of the 62nd Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 906–922, Bangkok, Thailand, August 2024. Association for Computational Linguistics
- 3. Jason Cai, Hang Su, Monica Sunkara, Igor Shalyminov, and Saab Mansour. CERET: Cost-effective extrinsic refinement for text generation. In Kevin Duh, Helena Gomez, and Steven Bethard, editors, *Proceedings of the 2024 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (Volume 1: Long Papers)*, pages 7377–7390, Mexico City, Mexico, June 2024. Association for Computational Linguistics
- 4. Shunqi Mao, Chaoyi Zhang, Hang Su, Hwanjun Song, Igor Shalyminov, and Weidong Cai. Controllable contextualized image captioning: Directing the visual narrative through user-defined highlights. In *Proceedings of the 18th European Conference on Computer Vision (ECCV)*, 2024
- 5. Liyan Tang, Igor Shalyminov, Amy Wing mei Wong, Jon Burnsky, Jake W. Vincent, Yu'an Yang, Siffi Singh, Song Feng, Hwanjun Song, Hang Su, Lijia Sun, Yi Zhang, Saab Mansour, and Kathleen McKeown. Tofueval: Evaluating hallucinations of llms on topic-focused dialogue summarization. In NAACL 2024, 2024
- 6. Hossein Aboutalebi, Hwanjun Song, Yusheng Xie, Arshit Gupta, Justin Sun, Hang Su, Igor Shalyminov, Nikolaos Pappas, Siffi Singh, and Saab Mansour. Magid: An automated pipeline for generating synthetic multi-modal datasets. In NAACL 2024, 2024
- 7. Jianfeng He, Hang Su, Jason Cai, Igor Shalyminov, Hwanjun Song, and Saab Mansour. Semi-supervised dialogue abstractive summarization via high-quality pseudolabel selection. In NAACL 2024, 2024
- 8. Yuwei Zhang, Siffi Singh, Sailik Sengupta, Igor Shalyminov, Hang Su, Hwanjun Song, and Saab Mansour. Can your model tell a negation from an implicature? unravelling challenges with intent encoders, 2024
- 9. 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
- 10. 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
- 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
- 12. 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
- 13. 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

- 14. 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
- 16. 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
- 17. 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
- 18. 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
- 19. 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
- 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
- 21. 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
- 23. Arash Eshghi, Igor Shalyminov, and Oliver Lemon. Interactional dynamics and the emergence of language games. CEUR Workshop Proceedings, 1863:17–21, 2017
- 24. 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