Shinhyeok Oh

1997.09.27
+82-10-3125-7712
achromatically@naver.com
https://shinhyeokoh.github.io
Research Interests: NLP, Dialog System, Sentiment Analysis
Yongin-si, Gyeonggi-do

Education

2019.09 - 2021.02	**Kangwon National University**
(M.S.)	Department of Computer and Communications Engineering
	GPA: 4.31 / 4.5
2016.03 - 2021.02	**Kangwon National University**
(B.S.)	Department of Computer and Communications Engineering
	GPA: 3.86 / 4.5

Experience

2021.04 – Present	**Netmarble**
(Alternative Military Service)	NLP Researcher & Engineer
2020.09 – 2021.02.	**Kakao Enterprise**
(Research Internship)	NLP Researcher
2020.03 – 2020.09	**Natural Language Processing Lab, Konkuk University**
2018.08 – 2020.02	**Natural Language Processing Lab, Kangwon National University**

Research & Development

Neural Machine Translation

2021.04 – Present	Maintenance on Game NMT Service
2021.04 – 2021.07	Research on Automatic Post-editing on NMT using Curriculum Learning Strategy and Multi-task Learning

Text-to-Speech Synthesis

2022.05 – 2022.08 Research on Text-to-Speech Synthesis with NLP Approach

Aspect-based Sentiment Analysis

2020.09 – 2021.02 Research on Aspect-based Sentiment Analysis using Self-supervised and Multi-task Learning

Dialog System

2021.11 – 2022.04 (PoC) Development of Persona Chatbot using data created by KoGPT3

2021.08 – 2021.10 (PoC) Development of Chatbot with Passage Retrieval

2018.08 - 2020.08 Research on Persona-based Chatbot

Publications (*equal contribution)

International Conferences

[3] **Shinhyeok Oh***, HyeongRae Noh*, Yoonseok Hong, Insoo Oh, "RWEN-TTS: Relation-aware Word Encoding Network for Natural Text-to-Speech Synthesis", Proceedings of Thirty-Seventh AAAI Conference on Artificial Intelligence **(AAAI 2023, to be published)**

[2] **Shinhyeok Oh***, Sion Jang*, Hu Xu*, Shounan An, Insoo Oh, "Netmarble AI Center's WMT21 Automatic Post-Editing Shared Task Submission", Proceedings of the Sixth Conference on Machine Translation (WMT), pp.312-319, 2021.11. **(WMT @EMNLP 2021, 1st place)**

[1] **Shinhyeok Oh***, Dongyub Lee*, Taesun Whang, IlNam Park, Gaeun Seo, EungGyun Kim, Harksoo Kim, "Deep Context- and Relation-Aware Learning for Aspect-based Sentiment Analysis", Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing (Volume 2: Short Papers), pp. 495–503, 2021.08. **(ACL 2021)**

International Journals

[2] Gihyeon Choi, **Shinhyeok Oh**, Harksoo Kim, "Improving Document-Level Sentiment Classification Using Importance of Sentences", Entropy, Vol.22(12), pp.1-11, 2020.11. **(SCIE)**

[1] Jintae Kim, **Shinhyeok Oh**, Oh-Woog Kwon, Harksoo Kim, "Multi-Turn Chatbot Based on Query-Context Attentions and Dual Wasserstein Generative Adversarial Networks", Appl. Sci., 3908, 2019.9. **(SCIE)**

Domestic Publications

[10] **Shinhyeok Oh**, Seokwon Jung, Harksoo Kim, "Method of Reflecting Various Personas in a Chatbot", Journal of KIISE, pp. 160-166, 2021. 2.

[9] HongJin Kim, Damrin Kim, Boeun Kim, **Shinhyeok Oh**, Harksoo Kim, "Movie Revies Sentiment Analysis Considering the Order in which Sentiment Words Appear", Proceedings of the 32th Annual Conference on Human and Cognitive Language Technology, pp. 313-316, 2020.10.

[8] HongJin Kim, **Shinhyeok Oh**, Harksoo Kim, "Korean Named Entity Recognition Using ELECTRA and Label Attention Network", Proceedings of the 32th Annual Conference on Human and Cognitive Language Technology, pp. 333-336, 2020.10.

[7] **Shinhyeok Oh**, Harksoo Kim, "Korean Generative Chatbot using Topic Embedding", Proceedings of the 32th Annual Conference on Human and Cognitive Language Technology, pp. 524-528, 2020.10.

[6] **Shinhyeok Oh**, Harksoo Kim, Jeong-Eom Lee, Seona Kim, Youngmin Park, Myungho Noh, "Personal Characteristics Classifier for Persona Chatbot Research", Proceedings of the Korea Software Congress 2019, pp. 419-421, 2019.12.

[5] **Shinhyeok Oh**, Jintae Kim, Harksoo Kim, Jeong-Eom Lee, Seona Kim, Youngmin Park, Myungho Noh, "Personalized Multi-Turn Chatbot Based on Dual WGAN", Proceedings of the 31th Annual Conference on Human and Cognitive Language Technology, pp. 49-53, 2019.10.

[4] HongJin Kim, **Shinhyeok Oh**, Damrin Kim, Boeun Kim, Harksoo Kim, "Multi-head Attention and Pointer Network Based Syllables Dependency Parser", Proceedings of the 31th Annual Conference on Human and Cognitive Language Technology, pp. 572-574, 2019.10.

[3] **Shinhyeok Oh**, Jintae Kim, Youngmin Park, Seona Kim, Jeong-Eom Lee, Harksoo Kim, "Persona Reflection Method for Generative Chatbot System", Korea Computer Congress 2019, pp. 1761-1763, 2019.06.

[2] Seongsik Park, **Shinhyeok Oh**, Hongjin Kim, Sihyung Kim, Harksoo Kim, "Korean Dependency Parsing Using ELMo and Multi-head Attention", Proceedings of the 30th Annual Conference on Human and Cognitive Language Technology, pp. 8-12, 2018.10.

[1] Seongsik Park, **Shinhyeok Oh**, Hongjin Kim, Harksoo Kim, "Korean Dependency Parsing using Multi-head Attention and Pointer Network", Proceedings of the 30th Annual Conference on Human and Cognitive Language Technology, pp. 682-684, 2018.10.

Appointments & Awards

[6] The 1st Place in the APE task @WMT, EMNLP 2021 (Automatic Post-Editing), 2021.11.

[5] Special Prize in Korean Language Information Processing Competition (Chatbot), 2020.10.

[4] Special Prize in Korean Language Information Processing Competition (Sentiment Analysis), 2020.10.

[3] Bronze Prize in Korean Language Information Processing Competition (Dependency Parsing), 2019.10

[2] Gold Prize in 1st Kangwon SW Festival, 2019.09.

[1] Grand Prize in Korean Language Information Processing Competition (Dependency Parsing), 2018.10.

Certificates

- Certificate of Engineer Information Processing, Human Resources Development Service of Korea, 19201110331K

Skills

- Languages: Python, Java, C, C#, HTML/CSS/JS, Android
- Deep Learning Libs: PyTorch, Tensorflow
- Etc.: Springboot, Gnuboard, Google Cloud Platform

Academic Activities

- Reviewer of IEEE Transactions on Audio, Speech and Language Processing