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http://www.linkedin.com/in/jinsoobae/

Education

2020 – Present **Ph.D.Candidate, Korea University** Industrial Management and Engineering.

2014 – 2020 **B.A, Konkuk University** Mathematics(GPA: 4.46/4.50) and Statistics(GPA: 4.50/4.50).

Experience

Project

2020 – 2021 **Development of Intelligent Game Service Platform based on Meta-play Analysis**, Electronics and Telecommunications Research Institute (ETRI).

2021 – 2021 **Prediction of Tire Force and Moment Using Artificial Intelligence**, Nexen Tire.

2020 – 2023 **Non-Invasive Sensor-Based Machine Learnings for Predicting Multiple Blood Components Levels**, Samsung Advanced Institute of Technology (SAIT).

2021 – Present **Discovery of Consumer Electronics Service Content Using Data Analysis**, Home Appliance & Air Solution, LG Electronics Inc.

2021 – 2023 **Technique Analysis and Model Prototyping for the Capability Evaluation and Weapon Correlation of Friend and Foe**, Agency for Defense Development (ADD).

2022 – Present **Development of Machine Learning Technology and Computing Tools for Fire Simulation**, National Research Foundation of Korea.

Development of Automatic Measurement Technology about Transmission Electron Microscopy Images, SK hynix.

Teaching Assistant

2021 **Predictive Analytics(2021R0136IMEN43100)**. In Graduate School of Industrial and Management Engineering, Korea University.

Digital Transformation Expert Training Course Commissioned Education. Supported by LG Engergy Solution.

Artificial Intelligence Expert Training Course. Supported by Hyundai-Steel.

Big Data Analyst Training Course. Supported by SK-hystec Inc.

2022 **Multivariate Statistical Analysis for Data Mining(20221R0309IME56700)**. In Graduate School of Industrial and Management Engineering, Korea University.

LG Electronics Digital Transformation Intensive Course. Supported by LG Electronics Inc.

Artificial Intelligence Expert Training Course. Supported by Hyundai-Steel.

2023 **LG Electronics Digital Transformation Intensive Course**. Supported by LG Electronics Inc.

Experience (continued)

Award

2022 **Best Oral Presentation**. Awarded by International Conference on Industrial Engineering and Applications (ICIEA).

Research

Journal Articles

1. Kim, C., **Bae**, **J.**, Baek, I., Jeong, J., Lee, Y. J., Park, K., … Kim, S. B. (2023). Desem: Depthwise separable convolution-based multimodal deep learning for in-game action anticipation. *IEEE Access*.
2. **Bae**, **J.**, Lee, M., & Kim, S. B. (2022). Safe semi-supervised learning using a bayesian neural network. *Information Sciences*. doi:https://doi.org/10.1016/j.ins.2022.08.094
3. Yoo, L., Cho, Y. S., Mok, C., **Bae**, **J.**, Jeong, K., & Kim, S. B. (2022). Non-invasive sensor-based multi-output networks for predicting multiple blood components levels. *Journal of the Korean Institute of Industrial Engineers*, *48*(5), 519–527.
4. **Bae**, **J.**, & Kim, S. B. (2021). Predictions of covid-19 in korea using machine learning models. *Journal of the Korean Institute of Industrial Engineers*, *47*(3), 272–279.
5. Lee, M., **Bae**, **J.**, & Kim, S. B. (2021c). Uncertainty-aware soft sensor using bayesian recurrent neural networks. *Advanced Engineering Informatics*, *50*, 101434. doi:https://doi.org/10.1016/j.aei.2021.101434

Conference Proceedings

1. Baek, I., **Bae**, **J.**, Jeong, K., Lee, Y. J., Jo, U., Kim, J., & Kim, S. B. (2023). Self-supervised learning for predicting invisible enemy information in starcraft ii. In *Proceedings of sai intelligent systems conference* (pp. 167–172). Springer.
2. Lee, Y. J., Baek, I., Jo, U., Kim, J., **Bae**, **J.**, Jeong, K., & Kim, S. B. (2023). Self-supervised contrastive learning for predicting game strategies. In *Proceedings of sai intelligent systems conference* (pp. 136–147). Springer.
3. **Bae**, **J.**, & Kim, S. B. (2022). An uncertainty-based data processing method for reducing overconfidence in bayesian neural networks. In *2022 korea data mining society, seoul, korea*.
4. **Bae**, **J.**, Lee, M., & Kim, S. B. (2021a). A bayesian uncertainty regularization method for supervised and safe semi-supervised learning. In *2021 korea data mining society, seoul, korea*.
5. **Bae**, **J.**, Lee, M., & Kim, S. B. (2021b). Safe semi-supervised deep learning using well-calibrated uncertainty of bayesian neural networks. In *Proceedings of the korean operations and management science society conference* (pp. 168–188).
6. **Bae**, **J.**, Lee, M., & Kim, S. B. (2021c). Safe semi-supervised learning using well-calibrated uncertainty of bayesian deep learning. In *The 2021 korean industrial engineering association spring conference* (pp. 168–188).
7. Baek, I., **Bae**, **J.**, Jeong, K., Lee, Y., Jo, U., Kim, J., & Kim, S. B. (2021a). Deep learning model for obscured enemy information prediction in starcraft ii. In *2021 informs annual meeting, virtual conference*.
8. Baek, I., **Bae**, **J.**, Jeong, K., Lee, Y., Jo, U., Kim, J., & Kim, S. B. (2021b). Predicting hidden information in real-time strategy games using deep neural networks. In *Proceedings of the korean operations and management science society conference* (pp. 376–393).

9. Baek, I., **Bae**, **J.**, Jeong, K., Lee, Y., Jo, U., Kim, J., & Kim, S. B. (2021c). Self-supervised contrastive learning for predicting game strategies. In *The 2021 korean industrial engineering association autumn conference* (pp. 340–352).
10. Lee, M., **Bae**, **J.**, & Kim, S. B. (2021a). Safe semi supervised learning using bayesian deep neural networks. In *The 2021 korean industrial engineering association autumn conference* (pp. 461–475).
11. Lee, M., **Bae**, **J.**, & Kim, S. B. (2021b). Safe semi-supervised learning using bayesian neural networks. In *2021 informs annual meeting, virtual conference*.
12. Lee, Y., Kahng, H., Baek, I., Jo, U., Kim, J., **Bae**, **J.**, … Kim, S. B. (2021). Self-supervised learning for predicting game play patterns and proficiency. In *Proceedings of the korean operations and management science society conference* (pp. 2674–2710).
13. Mok, C., Kwak, M., Cho, Y. S., Jeong, K., **Bae**, **J.**, & Kim, S. B. (2021). Prediction of blood lipid concentration using non-invasive optical sensors. In *The 2021 korean industrial engineering association spring conference* (pp. 2711–2728).
14. Yoo, L., Cho, Y. S., Mok, C., **Bae**, **J.**, Jeong, K., & Kim, S. B. (2021). Prediction of blood component concentration based on non-invasive sensors. In *The 2021 korean industrial engineering association autumn conference* (pp. 221–230).
15. Yoo, Y., **Bae**, **J.**, & Kim, S. B. (2021). Automatic recognition of scan documents using reliable deep learning. In *The 2021 korean industrial engineering association autumn conference* (pp. 1073–1080).

Skills

Languages	Strong reading, writing and speaking competencies for Korean, English.
Coding	Python, R.
Misc.	Academic research, teaching, training, consultation, LaTeX typesetting and publishing.

References

Available on Request