

# YUGO NAKAYAMA

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## Current Position

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R&D at Nissan Advanced Technology Center, Nissan Motor Co., Ltd.

## Research Interests

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- High-Dimensional, Low-Sample-Size Asymptotics
- Multivariate Analysis
- Machine Learning
- Deep learning

## Education

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### University of Tsukuba

*Doctor of Science, Graduate School of Pure and Applied Sciences*

**Apr. 2017 – Mar. 2020**

*Tsukuba, Ibarakai*

### University of Tsukuba

*Master of Science, Graduate School of Pure and Applied Sciences*

**Apr. 2015 – Mar. 2017**

*Tsukuba, Ibarakai*

### University of Tsukuba

*Bachelor of Science, Graduate School of Pure and Applied Sciences*

**Apr. 2011 – Mar. 2015**

*Tsukuba, Ibarakai*

## GRANT

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- Grant-in-Aid for Early-Career Scientists (Apr. 2021 – Mar. 2023) KAKENHI 21K13833
- Grant-in-Aid for Research Activity Start-up (Sep. 2020 – Mar. 2022) KAKENHI 20K22305
- Grant-in-Aid for JSPS Fellows (DC2) (Apr. 2019 – Mar. 2020) KAKENHI 19J10175

## WORKING EXPERIENCE

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**Assistant Professor at Graduate School of Informatics, Kyoto University**

**Apr. 2020 – Mar. 2023**

**Japan Society for the Promotion of Science (JSPS) Research Fellow (DC2)**

**Apr. 2019 – Mar. 2020**

## PUBLICATIONS

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### Journal Paper

- Nakayama, Y., Yata, K. and Aoshima, M. (2021), Clustering by principal component analysis with Gaussian kernel in high-dimension, low-sample-size settings. *Journal of Multivariate Analysis* (doi:10.1016/j.jmva.2021.104779)
- Nakayama, Y., Yata, K. and Aoshima, M. (2020), Bias-corrected support vector machine with Gaussian kernel in high-dimension, low-sample-size settings. *Annals of the Institute of Statistical Mathematics* 72(5), 1257 – 1286.
- Nakayama, Y. (2020), Support vector machine and optimal parameter selection for high-dimensional imbalanced data. *Communications in Statistics – Simulation and Computation* (doi: 10.1080/03610918.2020.1813300)
- Nakayama, Y. (2019), Robust support vector machine for high-dimensional imbalanced data. *Communications in Statistics – Simulation and Computation*, 50 (5), 1524–1540.
- Yata, K., Aoshima, M. and Nakayama, Y. (2018), A test of sphericity for high-dimensional data and its application for detection of divergently spiked noise. *Sequential Analysis*, 37(3), 397–411.
- Nakayama, Y., Yata, K. and Aoshima, M. (2017), Support vector machine and its bias correction in high-dimension, low-sample-size settings. *Journal of Statistical Planning and Inference*, 191, 88–100.

## INVITED TALKS

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- Nakayama, Y., Yata, K. and Aoshima, M. Clustering by kernel PCA with Gaussian kernel and tuning for high-dimensional data (in English, Oral),. The 4th International Conference on Econometrics and Statistics, June, 2021.
- Nakayama, Y. High-dimensional data classification based on Gaussian kernel (in Japanese, Oral),. MSJ Autumn Meeting 2021, Sep, 2021.