

# Taehwan Yoon, Ph.D.



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in LinkedIn




github Github



## Employment History


- 2023 – 2025  **Soongsil University** Teacher Assistant of Object Oriented Programming Class.
- 2022 – 2023  **Inc.YouthBioGlobal** Intern of ICT team

## Education

- 2025 – . . . .  **Ph.D. Computer Science and Engineering, Soongsil University**  
Research Topic: *Preserving Privacy Machine Learning.*
- 2023 – 2025  **M.Sc. Computer Science and Engineering, Soongsil University**  
Research Topic: *Preserving Privacy Machine Learning.*
- 2017 – 2023  **B.Sc. Computer Software, Korea Bible University**  
Research Topic: *Artificial Intelligence.*

## Research Publication


### Journal Articles

- 1 T. Yoon and B. Choi, “Clustered federated learning based on mahalanobis distance for sequential medical data,” *Journal of Information Processing Systems*, vol. 21, no. 6, pp. 564–574, 2025, ISSN: 1976-913X.  
 DOI: 10.3745/JIPS.03.0211.
- 2 T.-H. Yoon and B.-J. Choi, “Lower-grade glioma segmentation in dice-coefficient cross entropy weighted federated learning,” *KICS Winter Conference*, pp. 757–758, 2024.

### Conference Proceedings

- 1 J.-Y. Yoon, T.-H. Yoon, S.-B. Choi, J.-H. Kim, and B.-J. Choi, “Privacy preserving voice phishing detection using federated learning,” in *Annual Conference of KIPS*, Korea Information Processing Society, 2024, pp. 356–359.
- 2 T.-H. Yoon and B.-J. Choi, “Stress affect detection at wearable devices via clustered federated learning based on number of samples mahalanobis distance,” in *Annual Conference of KIPS*, Korea Information Processing Society, 2024, pp. 764–767.
- 3 T.-H. Yoon and B.-J. Choi, “Subnet based federated learning for protecting global model,” in *Annual Conference of KIPS*, Korea Information Processing Society, 2024, pp. 701–704.

### Arxiv Paper

- 1 T. Yoon and B. Choi, *Fedref: Communication-efficient bayesian fine tuning with reference model*, 2025. arXiv: 2506.23210 [cs.LG].  URL: <https://arxiv.org/abs/2506.23210>.

Skill

Nature Language	Strong reading, writing and speaking competencies for Korean, English.
Framework (AI)	Pytorch, Tensorflow, Flower
Programming Language	Java, Python, LaTeX, ...
Misc.	Academic research, teaching, training, consultation, LaTeX typesetting and publishing.

Project

2023 - . . . .	Professional manpower training for electronic manufacturing based on data analysis Role: <i>Researcher</i>
	Development of <i>R&amp;D</i> Human Resource and Technologies for Intelligent Cyber Threat Responses Role: <i>Researcher</i>
2023 - 2025	Innovative Human Resource Development for Local Intellectualization(Soongsil University) Role: <i>Researcher</i>
2024 - 2025	Graduate School of Security Convergence (Soongsil University) Role: <i>Researcher</i>
2024	Federated Learning and Federated Optimization Algorithms for Distributed Data Protection and Model Optimization in Smart Grids Role: <i>Researcher</i>

Award

KIPS (Korea)	2024 ASK conference best paper award.
KIAT (Korea)	Industry-academic challenge, winning a prize.