

Taehwan Yoon, Ph.D.

[✉ dbs1045@soongsil.ac.kr](mailto:dbs1045@soongsil.ac.kr)

[in LinkedIn](#)

[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: *Researcher*
- 2023 - ... ■ **Development of R&D Human Resource and Technologies for Intelligent Cyber Threat Responses**
Role: *Researcher*
- 2023 - 2025 ■ **Innovative Human Resource Development for Local Intellectualization(Soongsil University)**
Role: *Researcher*
- 2024 - 2025 ■ **Graduate School of Security Convergence (Soongsil University)**
Role: *Researcher*
- 2024 ■ **Federated Learning and Federated Optimization Algorithms for Distributed Data Protection and Model Optimization in Smart Grids**
Role: *Researcher*

Award

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