Suhwan Kim

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EDUCATION

Mar. 2021 ~ Present	**Konkuk University** Department of Computer Science and Engineering *Bachelor Student* GPA: 4.18 / 4.5	Seoul, Korea

RESEARCH INTERESTS

- Reinforcement learning
- Adversarial attack
- Optimization

PUBLICATIONS (SCIE/ESCI)

1. **Suhwan Kim**,Sehun jung,Hyang-won Lee, "Distributed Computation of DNN via DRL With Spatiotemporal State Embedding", *IEEE INTERNET OF THINGS JOURNAL*, (2024)

2. Vaughn Sohn,**Suhwan Kim**,Hyang-Won Lee, "Layering RL and Lyapunov Optimization for Video Frame Drop and Object Detection Task Offloading", *Under Review* (2024)

SKILLS AND TECHNIQUES

- Programming Languages : **Python(pytorch, tensorflow)**, C++, JS
- Frameworks: OMNeT++, OpenVSwitch

RESEARCH EXPERIENCES

- Research Student at Connected Intelligence Lab, Konkuk University, Korea (Feb. 2022 ~ Present) / Distributed DNN Scheduling, Establishing Wireless Multi-hop Network

SCHOLARSHIPS & AWARDS

- Half-tuition Scholarship, Konkuk University, Korea (April. 2021 - July. 2022)
- Scholarship for Academic Excellence, Konkuk University, Korea (Aug. 2023)

- Scholarship for Academic Excellence, Konkuk University, Korea (Feb. 2024)
- Dean's List, Konkuk University, Korea (Jan. 2021)

RELEVANT COURSEWORKS

- **Mathematics**
  - Algebra, Discrete mathematics, Numerical Analysis, Linear Algebra, Algorithms, Probability and Statistics
- **AI**
  - Artifitial Intelligence, Machine Learning, Computer Vision, Data Science

PROJECTS

- Industrial Project 1 : ALIVE (Audio-Lip Integrated Voice Enhancement), Konkuk University, Korea/ **ML Lead** (Mar. 2023 ~ Jun. 2023)
  - Addressed "Cocktail Party Problem"
  - **Audio-Video multimodal(cross-attention)** lip reading task.
- Opensource Project 2: RAID (Reinforcement Assisted Image Defense against Adversarial Attacks), University, Korea/ **DRL Lead** (Nov. 2023 ~ Dec. 2023)
  - Addressed "Adversarial Defense"
  - **RL-based adversarial defense**
- Graduation Project 1&2 : Research on robust neural networks, Konkuk University, Korea (Sep. 2023 ~ Jun. 2024)
  - Addressed "Adversarial Training"
  - **Sharpness aware adversarial training**
- Alwaygen: Point-of-care testing project, K-Startup(전북창조경제혁신센터), Korea/ PM (Feb. 2024 ~ Present)
  - Development of Control Program
  - 100M₩ funded
- GachiDutch: Taxi sharing service, Goyang City Youth Foundation, Korea
  - 4M₩ funded