WONSEO CHOI

Seoul, Republic of Korea
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Wonseo-C.github.io

EDUCATION

Hanyang University
M.S. in Electronic Engineering — *Mar 2022 - Feb 2024*
Overall GPA: 4.44 / 4.5

B.S. in Electric Engineering (Minor in Electronic Engineering) — *Mar 2017 - Feb 2022*
Overall GPA: 4.08 / 4.5 (Major GPA: 4.18 / 4.5)

EXPERIENCE

LG Display — Mar 2024 - Current
Big Data Engineer — *Paju, Gyeonggi-do*

- Improve yield through big data analyzing.

UN Lab, Hanyang Univ. — Jun 2023 - Jul 2024
Master Student — *Advisor: Jae-Il Jung*

- Apple Watch APP for Integrating UWB Technology and advanced medical data monitoring
- Localizing System Design for IMU Tag
- TA for Probability & Statistics, Computer Network

HYU IoT Lab, Hanyang Univ. — Dec 2021 - Aug 2023
Master Student — *Advisor: Hokeun Kim*

- Modeling/Simulation of Cyber-Physical Systems, AI for Network/Embedded Systems
- IMU Sensor Fusion for Location Tracking using Kalman Filter (MCU Board)
- Path-loss Prediction using Deep Neural Network
- WiFi AP Localization using Convolutional Neural Network
- Mutation support for Lingua Franca with implementing Savina Benchmark

· Android App for Handwriting Number Recognition using Google ML Kit

Catholic Univ. of Korea Yeouido ST.Mary's Hospital Aug 2020 - Feb 2021
Intern *Seoul, Korea*

· Developed an automated system to extract test results from image-based result sheets using Big Data Processing techniques for AI applications
· Conducted experiments and implemented a research paper focusing on domain adaptation through the application of Generative Adversarial Networks (GANs)

KIST Europe Feb 2020 - Jul 2020
Intern *Saarbrücken, Germany*

· Developed an automated system to acquire experimental data, enabling the calculation of heart rate by analyzing variations in the size of heart images across different frames
· Improved cell tracking performance by focusing on the enhancement of the U-Net layer, analyzing and optimizing the Localization component responsible for accurate cell tracking

SPA Lab, Hanyang Univ. Mar 2019 - Feb 2020
Intern

· Deep Learning Object Detection - Self driving Car

TECHNICAL STRENGTHS

Computer Languages	Python(with PyTorch, Tensorflow, Keras), MATLAB, Assembly Java, C++, TypeScript
Developing Environments	Mac, Windows, Linux (Ubuntu Server)

PAPER

1. **W. Choi** et al., "Enhanced Wi-Fi Access Point Positioning Using Hexagonal CNN With Mobile Data and Urban Information," in IEEE Internet of Things Journal, doi: 10.1109/JIOT.2024.3431918.

2. Sung, S., **Choi, W.**, Kim, H., & Jung, J. I. (2023). Deep Learning-Based Path Loss Prediction for Fifth-Generation New Radio Vehicle Communications. IEEE Access.

3. Kim, T. M., **Choi, W.**, Choi, I. Y., Park, S. J., Yoon, K. H., & Chang, D. J. (2021). Semi-AI and Full-AI digitizer: the ways to digitalize visual field big data. Computer Methods and Programs in Biomedicine, 207, 106168.

4. Suh, S., Cheon, S., **Choi, W.**, Chung, Y. W., Cho, W. K., Paik, J. S., ... , & Lee, Y. O. (2022). Supervised segmentation with domain adaptation for small sampled orbital CT images. Journal of Computational Design and Engineering, 9(2), 783-792.

CONFERENCE

Wonseo Choi, Yongoh Lee, "Attention-aware U-Net toward the interpretability of single cell segmentation", KCCV 2020, Republic of Korea (Online) - demo video

AWARDS

1. Academic Excellence Award in the Hanyang Univ. graduation ceremony *Feb 2022*

2. Encouragement Award in the "HY-Running Pace Maker" Program *Jan 2022*

OTHER ACTIVITIES

겨자씨 키움센터 Feb 2021 - Aug 2021

Founding Activities

· Obligatory recording paper Digitization Artificial intelligence learning model (module) development

Visiting U.C. Berkeley Jun 2022 - Jul 2022 , Feb 2023

· Design and develop the implementation of LF mutations

TEACHIING ASSISTANT

Probability & Statistics Sep 2023-Dec 2023

· Generating Random Variables based on Probability distributions using MATLAB

Computer Network Sep 2023-Dec 2023

· Basic Algorithm for Computer Network using MATLAB