WONSEO CHOI

Seoul, Republic of Korea
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https://wonseo-c.github.io/



EDUCATION

Hanyang University

M.S. in Electronic Engineering

Overall GPA: 4.44 / 4.5

B.S. in Electric Engineering (Minor in Electronic Engineering)

Overall GPA: 4.08 / 4.5 (Major GPA: 4.18 / 4.5)

Mar 2022 - Feb 2024

Mar 2017 - Feb 2022

EXPERIENCE

LG Display

Big Data Engineer

· Improve yield through big data analyzing.

Mar 2024 - Current *Paju, Gyeonggi-do*

UN Lab, Hanyang Univ.

Master Student

Jun 2023 - Jul 2024 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.

Master Student

Dec 2021 - Aug 2023 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

Intern

Aug 2020 - Feb 2021 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

- I. **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

격자씨 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

TEACHING 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