

# WONSEO CHOI

Seoul, Republic of Korea

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<https://wonseo-c.github.io/>



## EDUCATION

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### Hanyang University

Mar 2022 - Feb 2024

*Master of Science in Electronic Engineering*

- *Research Topic: AI for Network/Embedded Systems and Modeling/Simulation of Cyber-Physical Systems*
- *Overall GPA: 4.44 / 4.5*

### Hanyang University

Mar 2017 - Feb 2022

*Bachelor of Science in Electric Engineering*

- *Minor in Electronic Engineering*
- *Overall GPA: 4.07 / 4.5 (Major GPA: 4.18 / 4.5)*

## RESERACH PROJECT

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### AI

- WiFi AP Localization using Convolutional Neural Network (with KT)
- Path-loss Prediction using Deep Neural Network
- **Embedded**
- Modeling/Simulation of Cyber-Physical Systems, AI for Network/Embedded Systems
- Path-loss Prediction using Deep Neural Network
- Modeling/Simulation of Cyber-Physical Systems, AI for Network/Embedded Systems

## PAPER

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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, vol. 11, no. 20, pp. 33820-33832, 15 Oct.15, 2024.
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.

## EXPERIENCE

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### **LG Display**

*Big Data Scientist/Engineer*

Mar 2024 - Current

*Paju, Gyeonggi-do*

- Improve yield through big data analyzing.

### **Catholic Univ. of Korea Yeouido ST.Mary's Hospital**

*Research Intern*

Aug 2020 - Feb 2021

*Seoul, Korea*

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

### **KIST Europe**

*Intern*

Feb 2020 - Jul 2020

*Saarbrücken, Germany*

- Develop 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
- Improve cell tracking performance by focusing on the enhancement of the U-Net layer, analyzing and optimizing the Localization component responsible for accurate cell tracking

## TECHNICAL STRENGTHS

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### **Computer Languages**

Python(with PyTorch, Tensorflow, Keras), R, MATLAB, Assembly  
Java, C++, TypeScript

### **Developing Environments**

Mac, Windows, Linux (Ubuntu Server)

## ONLINE-DEMO

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

## OTHER ACTIVITIES

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### **겨자씨 키움센터**

*Founding Activities*

Feb 2021 - Aug 2021

- 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 Lingua-Franca(opensource project) mutations

## TEACHING ASSISTANT

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### **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

## AWARDS

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1. Academic Excellence Award in the Hanyang Univ. graduation ceremony *Feb 2022*
2. Encouragement Award in the "HY-Running Pace Maker" Program *Jan 2022*