## **Woo Hyun Song**

Senior Undergraduate Student
Electronics and Electrical Engineering
Dankook University
152, Jukjeon-ro, Suji-gu, Yongin-si, Gyeonggi-do, Republic of Korea

## PERSONAL DATA

- Born 14 March 2000 in Pyeongtaek-si, Gyeonggi-do
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# **EDUCATION**

Mar.2019 ~ Feb.2025 (expected)	<b>Dankook University</b> Major: Electronics and Electrical Engineering GPA: 3.85 / 4.5, Major GPA: 3.94 / 4.5 (Credits taken: 122/130)	Gyeonggi-do Yongin-si
Mar.2016 ~ Feb.2019	Hyeonhwa High School	Gyeonggi-do Pyeongtaek-si

# **RESEARCH INTEREST**

- Artificial Intelligence
- Deep Learning
- Fuzzy control
- Computer Vision

#### **Related Courses**

- Autonomous driving mobility image processing
- Automatic control systems
- Control system design
- Electronic circuit

# **PROJECT**

Mar.2024 ~ Present	Animal Detection Model  - Role: Data Acquisition, Data Labeling, Object Detection Model Training  - A capstone design project that detects harmful animals (Object Detection) in the wild, such as wild boars and water deers, using depth cameras and deep learning, and displays the location where an animal is detected on a map using Kakao Map API
Jun.2024 ~ Aug.2024	LLM-to-Diffusion - Role: Segmentation model Fine-tuning, Prompt Tuning

- A project that uses DeepFashion dataset, Gemini API, Stable Diffusion pipeline, and Segmentation model to find clothing parts in images (Segmentation) and then generates modified images by replacing them with new designs or colors (Inpainting) based on input text.

Oct.2023~ Increasing the Efficiency of NMOS

Dec.2023 - A project that minimizes the threshold voltage and maximizes the drain current by adjusting design variables when a specific drain voltage and gate voltage are given by comparing them

with the characteristics of the reference model using T-CAD

### **SCHOLARSHIP**

Aug.2024	Academic Excellence Scholarship
Aug.2022	Special Academic Scholarship
Feb.2019	Admission Excellence Scholarship

# **QUALIFICATIONS**

31 Mar.2024 TOEIC: 815

### **SKILLS**

**Programming** Python(main), C, MATLAB **Languages** 

Tools PyTorch(main), OpenCV, NumPy, NI Multisim, PSpice