# Beomseo Choi

E-mail: beomseo0707 at gmail.com Phone: +82 10-8355-0772

### **Research Interests**

- Deep generative model.
- Advanced AI-driven image editing and enhancement.

## **Education Experiences**

• B.S. in Computer Science, Daejeon University (DJU).

Mar. 2019 - Aug. 2024

o GPA: 4.5/4.5

#### **Publications**

• Beomseo Choi, Hongjun Kim, and Seung Hyun Jeon\*, "LSTM-based Time Series Forecasting of Pulmonary Function Test for COPD Early Diagnosis," The Journal of Korean Institute of Communications and Information Sciences (J-KICS) (Scopus).

Mar. 2024

## Work Experiences

• Undergraduate research student at Computing & Control Laboratory (CNCL) under the Sep. 2021 - Aug. 2024 advisory of Prof. Hongjun Kim at DJU.

Sep. 2023 - Dec. 2023

- Intern at The Researcher (TR) corporation.
  - Developed a pipeline for deploying machine learning models.
  - Represented the team as an exhibitor at CES 2024, demonstrating AI solutions to global audiences.

# **Project Experiences**

• Development of a Machine Learning-Based Precision Pulmonary Function Testing Device for Enhancing the Screening Rate of COPD in Primary Healthcare Institutions in Vietnam.

Apr. 2022 - Dec. 2023

- Conducted time-series analysis using Python and PyTorch.
- Developed and validated an LSTM-based AI model, achieving robust and reliable results despite small and imbalanced datasets.
- Applied data augmentation to enhance model performance and generalizability.

# **Teaching Experiences**

• C++ Tutor, DJU Tutoring Program.

Apr. 2023 - Jun. 2023

## **Patents**

• Prediction system and method for pulmonary function.

Jan. 2023

• Application Number: 10-2023-0006195

#### **Honors and Awards**

• On-campus Autonomous Driving Car Coding Competition.

Oct. 2021 - Nov. 2021

- o Grand Prize Winner.
- Autonomous driving based on IR sensors for maze escape.
- Tuition Scholarship for Excellent Academic Records.
  - Awarded six times for outstanding academic performance.

### Skills

- Programming Lnaguages: Python, C++.
- Frameworks & Libraries: Pytorch, DirectX 12.
- Tools: Git, Docker.

### Language

• TOEIC: 780