# JoonHee Lee

Aug 13, 2001

neo81389@gmail.com/jlstdio@github

#### **EDUCATION**

Advanced class at KNU Computer Engineering Education Institute for Gifted, Daegu, Korea

Daeryun High School, Daegu, Korea

Hongik Univ, Seoul, Korea

College of Computer Engineering

(3 - 2, G.P.A. 4.15 / 4.5)  $2014. Dec \sim 2015. Dec$   $2017. Mar \sim 2020. Feb$   $2021. Mar \sim 2025. Feb$ 

#### RESEARCH INTERESTS

Measuring & Mitigating bias on DL model

- LM debiasing
- FL debiasing

HCI (Human Computer Interaction)

- Extracting insights from edge device sensor data

#### **EXPERIENCES**

### [EIS lab @ Yonsei Univ] Undergraduate Intern

2024. Feb ~Present

Study on Artificial Intelligence using Embedded Sensors & Small Computing Power

- Measuring and mitigating bias on DL models
  - o Debiasing on Federated Learning
- Extracting insights from edge device sensor data

### [HCS lab @ CAU] Undergraduate Intern

2022. Dec ~Present

Study on Participatory Medical Technology through Radar Sensor and Deep Learning Model

- RFID reader & RF signal tracking for detecting human behavior.
- Low price & High quality stethoscope & SCG measurement using smartphone with deep learning.

### [VAST] Fouder, Team Lead

2020. Jan ~2023. Aug

- ARA Project
  - o Mobile(iOS & Android) Native Development
  - Project to make service that enables data transfer without OS barrier (araconnect.site)
- Mogak Project
  - o ML/DL Development
  - Place recommendation service to meet user's mood, and needs. Image ambiance match & review comment analysis.

# **AWARDS AND HONORS**

1st Place @ KU-Cambridge Campus Sharing Economy MAKEathon	2024
2 <sup>nd</sup> Place @ 세종혁신센터 세종 스마트 메이커톤	2021
Excellent Youth Scholar Award @ KSCY	2019
Scholarship Student @ 수성인재육성장학재단	2018
3 <sup>rd</sup> Place @ POSTECH 무한상상 메이커스 대회	2018

### **ACTIVITIES**

Member @ NAEK YEHS(한국공학한림원 차세대 공학리더) 2021. Sep ~ Present 2023, Dept of Human Resource 진로 및 공학 교육 봉사 및 회원 대상 세미나 참여 VR software engineer @ P.EYE (AR/VR media art team, hand interaction development) 2023. Aug ~ Present 2023, Software team VR(Unity) development 2024, Director of Software team Presenter @ SOSCON (Samsung Open Source Conference) 2017 WAG Project display Speaker @ 서울혁신센터 제 5 회 기술 공유회 2017 Introduction to opensource technology of drone & Modeling on various material to achieve lightweight. **PROJECTS** SKDM: Mobile sensor based keyboard stroke decoding model. Accelerometer & Microphone used. 2023. Oct ~ Nov Penso: Gaze tracking project using OpenCV & DL 2021

## **ETCs**

서울런 멘토링 멘토 : 차상위 계층 학생 진로, 학습 멘토링 & 감성 관리 2022. Aug ~ 2023. Feb 홍익대학교 공학혁신센터 코딩 수업 멘토 : 초, 중, 고 대상 코딩 교육 2022. May ~ Present 마포구청 도화 청소년 문화의 집 멘토 : 매 학기말, 중, 고등학생 대상 전공 설명회 2022. June ~ Present

2018

2018

 $2014 \sim 2019$ 

한글시계(Hangul Clock): Android based clock widget (new design of clock using Korean).

WAG: UAV system that is able to operate under the Water, over the Air, on the Ground

New Sense: Obstacle detect from back & warning system for bike user