

# Siwon Kim

DEEP LEARNING RESEARCHER

☎ (+82) 10-2007-4229 | ✉ kimsiw42@ajou.ac.kr | 📱 kimww42 | 🌐 sss1w0n

## Education

### Ajou University

BACHELOR'S DEGREE

- Major in Software and Computer Engineering
- Micro Degree in Artificial Intelligence in Medicine

Suwon, S.Korea

Mar. 2019 - Present

## Work Experience

### KAIST DAVIAN Lab

UNDERGRADUATE RESEARCHER

- Deep learning basic study, participation in paper seminars.

Seongnam, S.Korea

Jan. 2025 - Present

### Ajou CI Lab

UNDERGRADUATE RESEARCHER

- Study of text based Image Restoration.

Suwon, S.Korea

Oct. 2024 - Dec. 2024

### Seoul National University Bundang Hospital, AI Center

AI INTERN RESEARCHER

- Study of uterine X-ray image classification model based on contrastive learning.
- Study of LLM based on Medical Information.

Seongnam, S.Korea

Mar. 2024 - Aug. 2024

### Insilicogen, Inc.

BACKEND FREELANCE, BIOINFORMATICS INTERNSHIP

- Developed Backend server for healthcare challenge website.(<https://hb-showcase.kr/>)
- Machine Learning, Data Analysis, CLC Genomics Workbench, OmicsBox, IPA

Yongin, S.Korea

Jan. 2023 - May. 2023

## Research

### Image Restoration for Composite Degradation

AJOU UNIV

- Image Restoration Framework for Composite Degradation following Human Instructions.
- Restoration proposal of multiple gradation using text prompt in human instruction format.
- <https://github.com/kimww42/ICDR>

Suwon, S.Korea

Sep. 2024 - PRESENT

### Long-CLIP without Hallucination and Concept Association Bias

AJOU UNIV

- Eliminating Hallucination and Concept Association Bias for Long Text-Image Alignment.
- We present a way to solve the long clip's bias problem to deal with long text.

Suwon, S.Korea

Nov. 2024 - Dec. 2024

### 3D Mesh Stylization with Multiple Prompting

AJOU UNIV

- CLIP based 3D Mesh Stylization with Multiple Prompting.
- A proposal for a loss-splitting strategy to reflect multiple prompts well.
- <https://github.com/kimww42/3DS-MP>

Suwon, S.Korea

Jul. 2024 - Aug. 2024

### Diagnosis of Tubal Patency Using Contrastive Learning

SEOUL NATIONAL UNIVERSITY BUNDANG HOSPITAL

- Study of uterine X-ray image classification model based on contrastive learning
- Tubal Patency classification using Asymmetric Contrastive Loss.
- Asymetric contraptive learning proposal for addressing asymmetric data distribution.

Suwon, S.Korea

Mar. 2024 - Aug. 2024

## Publications

### ForestSplats: Deformable transient field for Gaussian Splatting in the Wild

WONGI PARK, MYEONGSEOK NAM, SIWON KIM, SANGWOO JO, SOOMOK LEE

under review (ICCV 2025)

Mar. 2025

Efficient Deep Learning Approaches for Processing Ultra-Widefield Retinal Imaging

SIWON KIM, WOYUNG YUN, JEONGBIN OH, SOOMOK LEE

MICCAIW 2024

Oct. 2024

Diagnosis for Tubal Patency with Contrast Medium in Hysterosalpingography Images Using Asymmetric Contrastive Learning

SIWON KIM, MYEONGJU KIM, JIN BYEONG PARK, HAERIN PAIK, YEON HEE HONG, JUNG RYEOL LEE

CKAIA 2024

Aug. 2024

A Real-Time Eye Gaze Tracking Based Digital Mouse

SEHYUN KWAK, DAEHO LEE, SIWON KIM, JUNGHOO PARK

IMIS 2024

Jul. 2024

근육병 환자를 위한 단일 카메라 기반 시선 추적 연구

SIWON KIM, DAEHO LEE, SEHYUN KWAK, JUNGHOO PARK

KIIS 2024

May. 2024

Honors & Awards

CHALLENGE

2024	3rd Award, Ajou Softcon	Suwon, S. Korea
2023	8th Award, Medical AI Idea Challenge(MOHW, KHIDI)	Seoul, S. Korea
2023	2nd Award, SNUBH COVID-19 Datathon	S. Korea
2023	1st Award, K-iium Medical AI Competition(PNUH, KNUH, CNUH)	S. Korea
2021	1st Award, R.O.K 11Div Internal Security Threat Detection Contest	S. Korea
2018	Finalist, 2018 KOI(Korea Olympiad in Informatics) National Final	Seoul, S. Korea
2018	Encouragement Award, 2018 KOI(Korea Olympiad in Informatics) Busan Regional Preliminary	Busan, S. Korea
2017	Encouragement Award, 2017 KOI(Korea Olympiad in Informatics) Busan Regional Preliminary	Busan, S. Korea

SCHOLARSHIP

2024	Da-San Scholarship, students showed excellent grades in the department.	Ajou Univ, S.Korea
2023	Won-Cheon Scholarship, students showed excellent grades in the department.	Ajou Univ, S.Korea
2019	SW Competency Scholarship, students showed excellent SW competency.	Ajou Univ, S.Korea
2019	SW Excellent Talent Scholarship, students entered the school through SW Specialist Screening	Ajou Univ, S.Korea

Skills and Interests

Programming Language	Python 3, C/C++, Java
Framework	Pytorch, OpenCV, Django
Certifications	Linux Master Level-II, Network Manager Level-II, Craftsman Information Processing
Languages	English(OPIC IM2)
Interests	Computer Vision, Image Synthesis, 3D Computer Vision, Contrastive Learning

Communities

A.N.S.I

Ajou Univ, S.Korea

MEMBER

Mar. 2019 - Dec. 2022

- Algorithm Research club at Ajou University