

# Seungtaek Lim

COMPUTER ENGINEER

Hansung University, Seoul, Republic of Korea 
□ (+82) 10-4938-8651 | ■ 0530lim@naver.com | ★ c0mputermaster.tistory.com

"Step By Step, Day By Day"

**Education** 

Hansung University Seoul, Korea

B.S. in Computer Engineering (Track: Digital Contents & Virtual Reality, Big Data)

Mar. 2020 - Feb. 2026 (Expected)

- Total GPA of 3.98 / 4.5, Major GPA of 4.03 / 4.5
- · Expected graduation in February 2026.

# Experience \_\_\_\_\_

### **AML Lab, Hansung University**

Seoul, Korea

Undergraduate Researcher

May 2024 – July 2025

- · Conducted research on semiconductor package defect detection using Transformer-based command classification models
- · Proposed and evaluated an automatic region of interest (ROI) extraction method for real-time defect inspection
- Contributed to academic publications and related research projects

#### DeepSeers (Spin-off from Hansung AML Lab)

Seoul, Korea

Computer Vision Software Engineer

May. 2024 - Dec. 2024

- Built machine vision software for semiconductor defect inspection, applied in industrial settings
- Designed ML-based vision algorithms for defect detection in packaging processes
- · Contributed to the product development and technical advancement of a startup founded from the AML Lab

# Research Projects\_\_\_\_\_

Development of AI based smart manufacturing process and equipment technology to strengthen the competitiveness of semiconductor materials parts and equipment

May. 2024 - Jul. 2025

South Korean Ministry of Trade, Industry and Energy

( Project No. 20022899 ,

# Projects \_\_\_

#### **Conversational Interface for Semiconductor Defect Detection using LLMs**

Mar. 2025 - Jul. 2025

AML Lab, Hansung University

Poster / Video Demo

- Designed a dialogue-based interface for semiconductor defect inspection using large language models
- · Conducted experiments and developed the full system, including model design and API server implementation

### Sporty-up: Mobile Vision-Based Sports Posture Analysis System

Dec. 2024 - Jun. 2025

Qualcomm

- Designed a hybrid system architecture using on-device and server-side models
- Researched and optimized object detection models for mobile devices
- Developed posture evaluation algorithms and server APIs

news Article / Github Repository

#### Automatic ROI Extraction System for Real-Time Semiconductor Defect Detection

Oct. 2024 - May. 2025

AML Lab, Hansung University

- · Contributed to a system that augments rule-based inspection with few-shot deep learning
- Participated in model design to extract fine-grained ROIs from semiconductor images
- Collaborated on research targeting real-time defect localization and automation

### **Gvision: Semiconductor Vision Inspection System**

Jun. 2024 - Dec. 2024

DeepSeers

- Developed vision inspection algorithms for multi-pad structures in semiconductor packages
- Designed and implemented inspection logic for edge defects such as chipping and burrs
- Contributed to the development of a machine vision pipeline for defect detection in packaging processes

# Others

· Analysis of Optimal Street Trash Bin Placement Using Public Data

(Python)

· Organizational Education Simulation Game for Elementary School Students

(Unity, C#) (Unity, C#)

 VR Wheelchair Experience Simulation Game · Watchu: OTT Management System

UNO Game with Socket Communication

(SQL, HTML) (Java)

· Personal Health Logging and Fitness Explanation App

(Android Studio, Java)

# Research

#### **Publications**

#### Design of a Physical AI System for Semiconductor Package Defect Detection Using a **Transformer-Based Command Classification Model**

Jun. 2025

Jiwoo Jang\*, Seungtaek Lim\*\*, Keejun Han\*\*\*

Korea Digital Contents Society Summer Conference Proceedings 2025, pp. 503-504

See the paper

#### Design of a Real-Time Posture Analysis and Feedback Mobile System for Indoor Sports

May. 2025

Seungtaek Lim\*, Juwan Son\*\*, Woojin Jang\*\*, Junhyeon Hwang\*\*, Keejun Han\*\*

Proceedings of KIIT Conference Summer 2025, pp. 1265-1268

#### Automatic Detailed Region of Interest Model for Real-Time Semiconductor Package **Defect Detection**

Mar. 2025

Seungtaek Lim\*, Youngjin Park\*\*, Wonyong Choi\*\*, Keejun Han\*\*\*

Journal of Microelectronics and Packaging, vol.32, no.1, pp.100-113

#### **Presentations**

### **Sports Posture Assessment and Feedback**

Seungtaek Lim\*, Juwan Son\*, Woojin Jang\*, Junhyeon Hwang\*

May 2025

Qualcomm University Relations - University Platforms Symposium 2025

#### Deep Learning-Based Automated Extraction of Component Regions for Semiconductor **Package Defect Detection**

Apr. 2025

Seungtaek Lim\*, Youngjin Park\*\*, Wonyong Choi\*\*, Keejun Han\*\*\* Korean Microelectronics and Packaging Society (KMEPS) Annual Conference

#### Automatic ROI Recommender for Saw Singulation: Seamless Adaptation for Various **Semiconductor Devices**

Nov. 2024

Gyeongmin Lee\*, Seungtaek Lim\*\*, Keejun Han\*\*\*

22nd International Symposium on Microelectronics and Packaging (ISMP-IRSP 2024)

# Awards & Honors

#### **Awards**

2025 Best Paper Award, Journal of the Microelectronics and Packaging Society, vol.32 no.1, 2025 Best Paper Award (Gold Prize), Korea Information Technology Society Summer Conference 2025 2025

**KMEPS** KIIT

#### **Honors**

2025 Outstanding Capstone Team, Represented Hansung Univ. at Qualcomm Symposium 2025 2024 **Dean's List**, Hansung University -Awarded for academic excellence (top 10%)

Hansung University Hansung University

# **Extracurricular Activity**

## **Student Group Activities**

### Digital Innovators (Official Student Group, Hansung University)

Oct. 2024 - Jan. 2025

Group Leader

- Led an official university student group focused on AI and computer science research
- Organized bi-weekly paper reading sessions, selecting and presenting recent research papers

#### **Part-Time Experience**

**SpoAny Fitness Center** 

Aug. 2023 - Mar. 2024 (8 months)

Front Desk Staff

**Yeongdeungpo Community Child Center** 

Administrative Assistant

Jan. 2023 - Feb. 2023 (2 months)

# **Skills and Techniques**

**Programming Languages** Python, Java, C#, C++, JavaScript, SQL, HTML, CSS

Frameworks & Libraries Halcon, WPF, Spring Boot, Android SDK, TensorFlow, PyTorch, scikit-learn Tools & Platforms Git, AWS (EC2, S3), LaTeX, Overleaf

Al / Data Analysis Object Detection, Pose Estimation, NLP (Transformer models), Pandas, Matplotlib

Mobile & Game Dev Android Studio, Unity, OpenCV

### **Technical Blog & GitHub**

**Blog:** c0mputermaster.tistory.com / **GitHub:** github.com/SeungtaekLim

Sharing insights on machine learning, computer vision, academic paper reviews, and troubleshooting.