# Lim, Jongyoon

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**EDUCATION** 

## Sogang University, Seoul

2019-2021

M.S., Art & Technology, 3.89 / 4.30

Relevant course work: Human-Computer Interaction, Artificial Intelligence, Haptics, AR/VR

## Soongsil University, Seoul

2014-2018

B.S., Electro Engineering (ABEEK), 4.12 / 4.50

Relevant course work: Circuit Design, Embedded Systems, Control Engineering, Machine Learning

#### PROFESSIONAL EXPERIENCE

#### **Project Manager / Software Developer**

2021-Present

Korea Ministry of Culture, Sports and Tourism & Sogang University, Seoul

- Programming and mobile app development
- Embedded systems and mechanical design for prototyping

## **Teaching Assistant / Project Mentor**

2024

Capstone Design and Industry Collaboration Course, Department of Computer Science, Sogang University, Seoul

- Mentored undergraduate students on project development in a university-industry collaboration course.
- Assisted in project management, resolved technical issues, and implemented hand position tracking in a 3D space using image recognition to enhance project outcomes.

#### Chief Technology Officer / Co-founder

2022-2024

ALAM, Seoul

 Developed a pen-shaped device with a standalone position tracking algorithm for spatial computing with VR devices

Student Worker 2022-2024

Sogang University, Seoul

- Received a work-study scholarship
- Managed finances and developed an accounting program

## Independent Entrepreneur

2019-2021

Panopticon Korea, Seoul

Development and sales business of healthcare electronic devices for newborns baby

## **Semiconductor Optical Engineer**

2017-2019

Canon, Suwon/Utsunomiya/Munich

- Maintained and optimized photolithography equipment
- Customer field service at semiconductor plant

Research Intern 2017

Multimedia Signal Processing Lab, Seoul

Image Recognition Research Intern

## Freelance Instructor, Seoul

2014-2015

Taught high school science to students

#### **PUBLICATIONS**

## Guide Dog AR: A Tactile and Auditory Assisting Device Design with the Motif of a Guide Dog for the Visually Impaired

2024

SM Shin, J Lim, Y Choi

International Journal of Human-Computer Interaction, 1-14

## Force-feedback haptic device for representation of tugs in virtual reality

2022

J Lim, Y Choi

Electronics, 11(11), 1730

## BirdVR: UX design that enhances the connection between the form of the VR controller and the interaction within the content,

2021

KM Bang, J Lim, H Jun, H Jo, JH Chu HCIK(HCI Korea)(2022): 813-815

#### PROJECTS AND ART EXHIBITIONS

## TrashApps, Mobile Web Application

2025

Seemingly useless but surprisingly useful mobile web apps, gathered for fun

## EverPen 2.0, Tangible Product

2024

EverPen 2.0 operates independently in a 3D coordinate system, redefining spatial computing

#### MMCA Storage Chat Mobile, iOS Application

2024

 An Al docent that provides personalized, real-time explanations using generative Al based on visitor location or exhibit photos

#### BearHands, VR Game

2024

 BearHands is a VR game that uses hand tracking and Oculus Quest 3's passthrough for a unique, immersive blend of puzzle-solving and FPS

EverPen 1.0, Tangible Product

2023

 EverPen 1.0 enhances input experience in VR with pen-like gestures integrated with VR controllers

Stern, Exhibition 2023

 Stern is an interactive lighting installation that responds dynamically to human presence and movement

## Starbound Odyssey, VR Game

2023

 Starbound Odyssey is a VR game that offers a spacewalk experience with toon shading and texturing.

#### **Idealavor,** Tangible Product

2022

 Idealavor explores multi-modality eating texture recreation using visual, auditory, and haptic feedback

#### Hotel Meta, Exhibition

2022

 Hotel Meta integrates VR with physical spaces, allowing immersive experiences and NFT-based interactions

#### AR Where Visitors' Footsteps Become The Artwork, Exhibition

2021

BLE Interior Positioning creates an AR platform that adapts dynamically to visitors' movements

## The Glasses, VR Movie

2020

 The Glasses is a VR film that uses virtual sunglasses to switch between scenes, enhancing immersion

## Table-It, Tangible Product

2017

 Table-It uses hand motion and color recognition to create a smart AR table for interactive content

#### EXTRACURRICULAR AND ACTIVITIES

Participated in the CES 2024 exhibition booth, Las Vegas

2024

Participated in the CHTF 2023 exhibition booth, Shenzhen

2023

Participation in the Korea Electronics Show 2022 Exhibition, Seoul

2022

Korea Electronics Association VR/AR Professional Project Team

2020-2021

IoT smart convergence expert training program, Seoul

2016

#### AWARDS AND HONORS

Selected the Arts Startup Program by the Arts Management Center, EverPen	2023
Selected K-startup Startup Package program, EverPen	2023
Cradle for Baby Monitoring Design Patent, Smart Cradle	2021
Top 7 in KT(Korea Telecom) SuperVR Contest, The Glasses	2020
Selected for the Al Voucher Government Support Program, Smart Cradle	2020
First Korean to obtain a global photolithography equipment install license, Canon	2018
Korea Minister of Engineering and Education Award, Table-it	2017
White Horse Academic Excellence Scholarship, Soongsil univ	2014-2018

#### **SKILLS**

## **Programming languages**

- Python (Al and image recognition)
- C/C++ (Embedded systems, low-level programming)
- C# (Game and VR/AR development)
- Swift (iOS development)
- JavaScript (Web development)

## **Hardware Engineering Skills**

- Professional hand tools
- Knowledge of material properties
- Soldering for circuit assembly and repair.
- Mechanical design and dynamic
- Circuit design and analysis
- 3D printing
- Laser cutting

## Computer software/ frameworks

- Microsoft office
- Unity
- Blender
- Final Cut / DaVinci Resolve
- Figma
- SPSS

- MATLAB
- OrCAD PSpice

## Languages

- Fluent **Korean** (native)
- Proficient in **English** (OPIc IH)
- Basic **Japanese** (speaking and listening)