Woojin Ko

M.S. in Computer Science Graduate, seeking full-time or freelance roles. US Citizen.

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Education

Cornell Tech / Cornell University - PhD Student Government President AUG 2022 - MAY 2025

M.S. / Ph.D in Computer Science: VR/AR & Human-Computer Interaction. GPA: 3.74/4.0

- **Teaching Courses:** Human Computer Interaction and Design, Building Startup Systems (Full-Stack)
- **Relevant Courses:** 3D User Interfaces, Virtual and Augmented Reality, Computer Vision, Algorithmic Fairness

University of California, Berkeley - EECS Honors Program (Breadth Concentration: HCI) AUG 2017 - MAY 2021

B.S. in Electrical Engineering and Computer Science GPA: 3.71/4.0

- **Interaction Courses:** Human Computer Interaction EECS Honors Thesis, Virtual Reality, Graphics, Tech Firm Leadership
- **Technical Courses:** Artificial Intelligence, Machine Learning, Algorithms, Security, Data Structures, Data Science

Professional Experience

OpenAI | (San Francisco, Remote) ***AI Research Engineer*** AUG 2025 - DEC 2025

- Evaluated the ability of AI agents to replicate models from state-of-the-art research with experiments and benchmark.

BravoMedia | (NYC) ***Creative Technologist*** MAR 2025 - PRESENT

- Created a retro-style Donkey Kong arcade game for the 2025 KPMG Tax Conference with tax-themed messages and icons.
- Designed and developed the game using Unity, C# scripts, Adobe Creative Suite, and generative AI.

Cornell Tech XR Colaboratory | (NYC) ***PhD Student Researcher*** AUG 2022 - MAY 2025

- Developed AR headset and mobile applications to assist informal caregivers and expert clinicians with at-home care tasks
- Built applications for Hololens 2 with Unity, C#, and OpenCV, and for iPhone with Xcode, Swift, and ARKit.

National Museum of Math | (NYC) ***Technical Exhibit Designer Intern*** AUG 2021 - DEC 2021

- Designed and redesigned several exhibits, aiming to make math more fun and interactive for museum visitors.
- Created a harmonograph simulator web app (HTML/CSS/Javascript) for 500+ attendees of the 2021 MoMath Gala.

Amazon Inc. | (Seattle, Remote) ***Software Development Engineer Intern*** MAY 2020 - AUG 2020

- Designed backend API for computing shipping deadlines for Amazon's vendors within the Purchase Order (PO) lifecycle.
- Implemented API (Java + PostGreSQL) and demonstrated successful calls on thousands of POs for training ML model.

UC Berkeley - FHL Vive Center for Enhanced Reality | ***Undergraduate Student Researcher*** APR 2019 - MAY 2021

- Co-founded an AR system that generates a holographic area for remote users to interact within, as if co-located in person
- Built much of the technical pipeline, leveraging 3D house scan data, spatial optimization algorithms, and the Hololens.

Neurofit | (Berkeley, Remote) ***Project Manager, Software Division Lead for Neurotech at Berkeley*** JAN 2020 - MAY 2021

- Managed team and delegated responsibilities to create an iOS eye tracking app for predicting neurological conditions.

Projects & Publications

2025 CHI - Conference on Human Factors in Computing Systems (Yokohama, Japan)

*L Jiang, **W Ko**, et. al. "Shifting the Focus: Exploring Video Accessibility Strategies and Challenges for People with ADHD"*

2024 ASSETS - Conference on Computers and Accessibility (St. John's, Canada)

*J Collins, **W Ko**, et. al. "Exploring the Accessibility of Social Virtual Reality for People with ADHD and Autism: Preliminary Insights"*

2024 JMIR - Journal of Medical Internet Research (New York, New York)

*L Albright, **W Ko**, et. al. "Opportunities and Challenges for Augmented Reality in Family Caregiving: Qualitative Video Elicitation Study"*

2023 Cornell Tech Open Studio Showcase (New York, New York) | *XRCare Demo*

2021 Electrical Engineering and Computer Sciences Honors Thesis Project (Berkeley, California) | *AR Video Query*

2020 Jacobs Design Institute Innovation Catalysts Spark Grant Winner (Berkeley, California) | *Piano Palette AR*

2020 IEEE VR - Conference on Virtual Reality and 3D User Interfaces (Atlanta, Georgia)

*M Keshavarzi, A Yang, **W Ko**, L Caldas. "Optimization and Manipulation of Contextual Mutual Spaces for Multi-User Virtual and Augmented Reality"*

2019 ISMAR - International Symposium on Mixed and Augmented Reality (Beijing, China)

*J Menke, **W Ko**, A Yang. "Tutorial: OpenARK - Tackling Augmented Reality Challenges via an Open-Source SDK."*

Technical Skills

Languages Java, Python, C#, C/C++, Swift, JavaScript, HTML/CSS, Golang, Bash

Libraries Pandas, SQL, TensorFlow, PyTorch, Keras, Sklearn, NumPy, SciPy, OpenCV, Flask, React, Jekyll, ARKit

Tools Git, CI/CD (GitHub Actions), Linux, Jupyter, AWS, Azure