Keehong Youn

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6 Years of experience in media programming with C++,
developing real-time audio-visual applications for media art projects and engineering research.

Skills

Interactive real-time graphics programming with C++, OpenGL, and GLSL
Multimedia programming and fast prototyping
Python, Javascript, Unity 3D

Education

Ph.D. in Media Arts and Technology. University of California, Santa Barbara	2019
M.S. in Mechanical and Aerospace Engineering. Seoul National University	2014
B.S. in Mechanical and Aerospace Engineering. Seoul National University	2007

Work Experience

AR/VR software engineer at Apple Inc.	Since 2019
Freelance: interactive installation for public events with Nike Korea	2015, 2017, 2019
Instructor: Interactive multimedia programming for media art	
- Korea Creative Content Agency, "Content Fusion Academy"	2015
- Samsung Electronics, "Software Challenge Camp"	2012, 2013, 2014
- Art Center Nabi, "Workshop Series: New Media Programming"	2011

Academic Research

Spherical projection mapping software for large scale immersive VR system 2015 - 2018
- "Transmission Electron Microscope/Atom Probe Visualization"
- "Interactive Visualization of Li or Na diffusion in intercalation compounds"

Finger tracking interface development using depth sensing camera 2012
- "Spatial interface for improving UX of car navigation system"
- Sponsor: Hyundai NGV

Upper body tracking system software development 2012
- "Home Rehabilitation System for Upper Limbs of Stroke Patient"
- Sponsor: Korean Ministry of Knowledge Economy and Microsoft Asia

AR based cell tracking software development for microscopes 2012

- "Single Cell Addressing by Microscope Augmented Reality"
- Sponsor: Korean Ministry of Education and Science Technology

Other

Open source contribution

- "Allolib", a C++ library for interactive multimedia applications

Publication

- PROBABLY/POSSIBLY?: An Immersive Interactive Visual/Sonic Quantum Composition and Synthesizer, Kuchera-Morin et al., Proceedings of the 25th ACM international conference on Multimedia, 2017
- Time-lapse microscopy using smartphone with augmented reality markers, Baek et al., Microscopy Research and Technique, Vol. 77, Issue 4, 2014
- ElaScreen: Exploring Multi-dimensional Data using Elastic Screen, Youn et al., SIGCHI 2013 Extended Abstracts