

Henry Kam

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Education

New York University, MS, PhD in Computer Science 2024 - Present
Advised by Prof. Qi Sun, Prof. Sai Qian Zhang
New York University, BS in Computer Science, Mathematics 2022 - 2024

Employment

Immersive Computing Lab, Research Assistant 2022 – Present
Computational Light Laboratory, Research Contributor 2024 – 2025
eBay, Software Engineering Intern 2024
Genesys, Software Engineering Intern 2023 - 2024
Shadowscape, Machine Learning Engineering Intern 2023

Awards & Honors

• **NYU CSE Leadership Award** 2024

Publications

Attention Drives Cybersickness in Augmented Reality 2026
Henry Kam, Niall L. Williams, Jeffrey Lubin, James R Bergen, Mikhail Sizintsev, Qi Sun, Colin Groth
Under Review at IEEE International Symposium on Mixed and Augmented Reality (ISMAR)
Gaze-Contingent Counter-Vection Noise for Cybersickness Reduction 2026
Colin Groth, *Henry Kam*, Piotr Didyk, Qi Sun
Under Review at IEEE International Symposium on Mixed and Augmented Reality (ISMAR)
Dichoptic Foveation 2026
Henry Kam, Colin Groth, Jenna Kang, Pratham Saraf, Qi Sun, Kenneth Chen
ACM Special Interest Group on Graphics (SIGGRAPH)

Posters

Camera Motion Impacts Cybersickness in Augmented Reality May 2026
Henry Kam, Niall L. Williams, Jeffrey Lubin, James R Bergen, Mikhail Sizintsev, Qi Sun, Colin Groth
Vision Sciences Society (VSS), Journal of Vision
Foveation Improves Payload Capacity in Steganography [link] – Dec 2025
Lifeng Qiu Lin, *Henry Kam*, Qi Sun, Kaan Akşit
ACM SIGGRAPH Asia

Projects

ICS: Intrinsic Cognitive Security [link] – May 2025
DARPA, SRI, *New York University*

- Simulated and mitigated AR cybersickness for defense applications
- Developing formal models to relate AR cybersickness to virtual content movement, tracking noise, physical movement

Odak [link] – Dec 2024
Kaan Akşit, Jeanne Beyazian, Praneeth Chakravarthula, Ziyang Chen, Mustafa Doğa Doğan, Ahmet Hamdi Güzel, Yuta Itoh, *Henry Kam*, Ahmet Serdar Karadeniz, Koray Kavaklı, Liang Shi, Josef Spjut, David Robert Walton,

Jialun Wu, Doğa Yılmaz, Wang Yujie, Runze Zhu, Weijie Xie, Yicheng Zhan

- Developed toolkit scientific computing in optical sciences, computer graphics, and visual perception
- Added visual perception lectures and documentation
- Modified metameric image losses to enable GPU compatibility, used to develop models and frameworks submitted to top conferences

Development of a Virtual Reality Spatial Retraining Therapy to Improve Neglect in Stroke Survivors

[link] – Nov 2023

Kessler Foundation, *New York University*

- Primary researcher collaborating with the Kessler Foundation to innovate immersive VR-based neurorehabilitation approaches, targeting deficits in spatial attention and cognitive functions.
- Designed engaging virtual environments with a dynamic scoring algorithm and integrated hand-tracking, optimizing patient engagement and rewarding tasks completed in neglected spaces.

Hyperrealistic, precise position, multi-astronaut training with XR Redirected Walking

[link] – Aug 2023

NASA, Orbital Outpost X, *New York University*

- Constructed algorithms in collaboration with NASA, delivering a virtual reality simulation for lunar task execution in confined spaces using C# and Unity.
- Architected a high-performance redirected walking algorithm using advanced strategies like head rotation and saccades, ensuring a seamless, latency-free, and immersive experience for astronauts.

Service

Peer Reviewing

- IEEE International Symposium on Mixed and Augmented Reality (ISMAR) – 2026
- ACM Special Interest Group on Graphics (SIGGRAPH) – 2026
- ACM International Conference on Advanced Visual Interfaces (AVI) – 2026