Docket #: S16-030

Accommodation-invariant Computational Near-eye Displays

Stanford inventors have developed a new approach to tackling the vergence-accommodation conflict, which is a common contributor to discomfort associated with virtual reality setups. As opposed to current methods which drive the vergence state of the human visual system to arbitrary distances while keeping the focus of the eyes to a fixed distance, this method is accommodation-invariant. Accommodation invariant displays are optically engineered to produce retinal blur cues that are invariant to the focus state of the eye. This system can be driven by stereoscopic cues while mitigating mismatching cues.

Applications

- Virtual Reality
- Augmented Reality

Advantages

- Better than pinholes, currently the only other method.

Patents

- Published Application: 20170236255
- Issued: 10,192,292 (USA)

Innovators

- Robert Konrad
- Gordon Wetzstein

Licensing Contact

Imelda Oropeza

Senior Licensing Manager, Physcial Sciences

Email