Background

Illustration of Parallax [1]

Accommodation-Vergence Conflict (AVC) [2]

[1] Source:https://www.mezzacotta.net/100proofs/archives/648
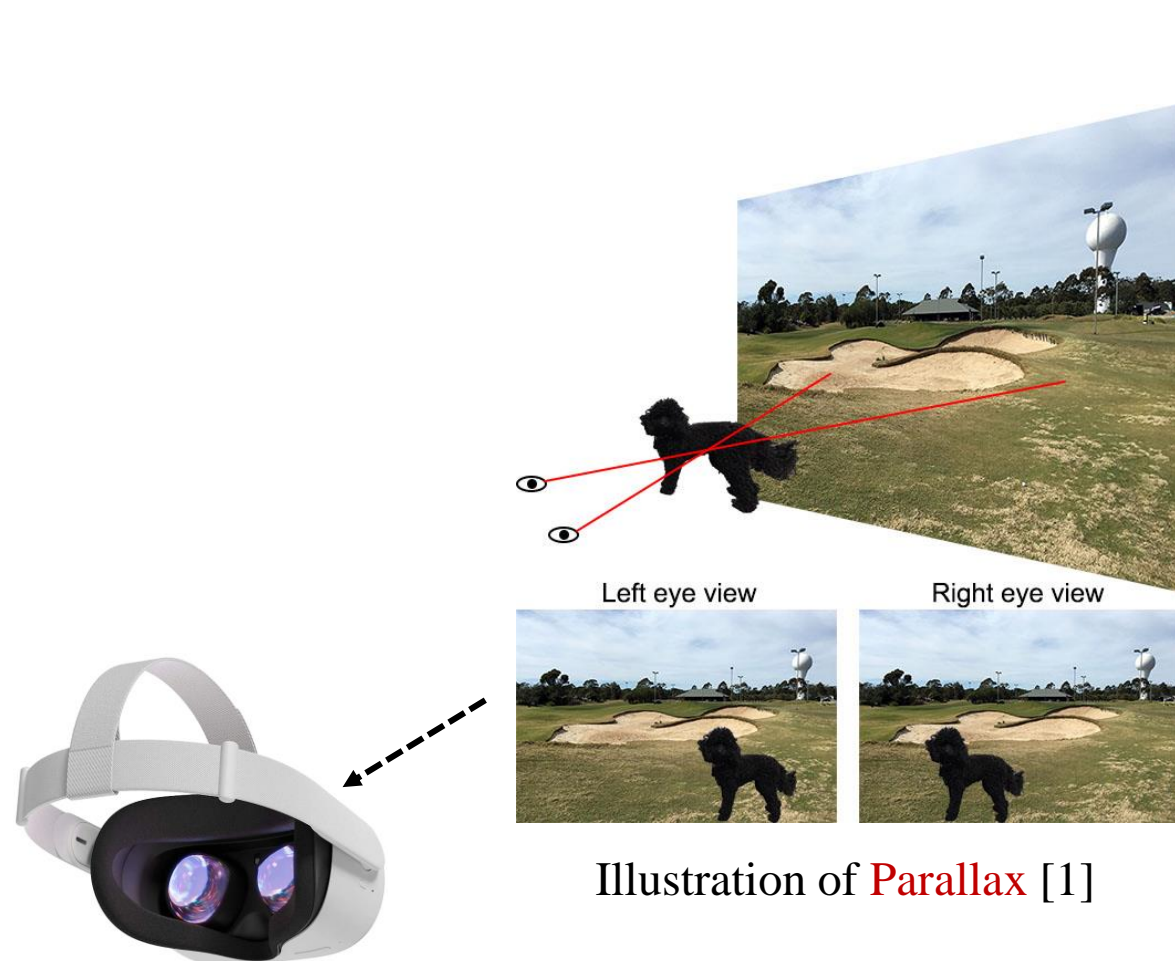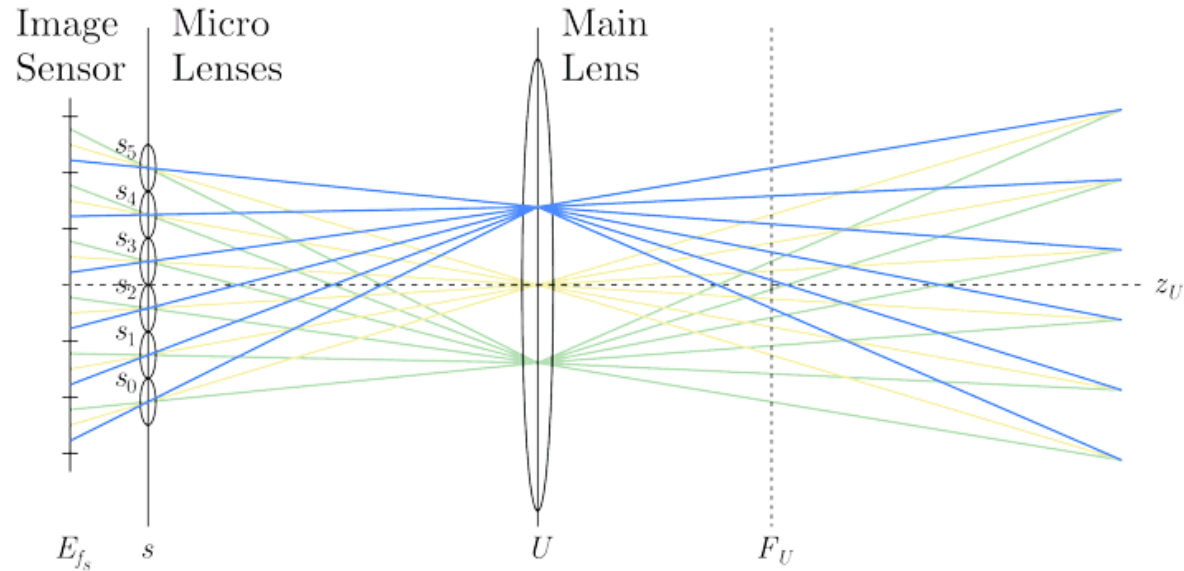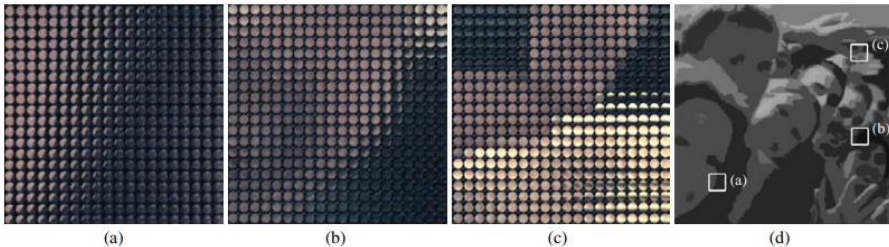
[2] Carnegie K, Rhee T. Reducing Visual Discomfort with HMDs Using Dynamic Depth of Field. IEEE Comput Graph Appl. 2015 Sep-Oct;35(5):34-41.

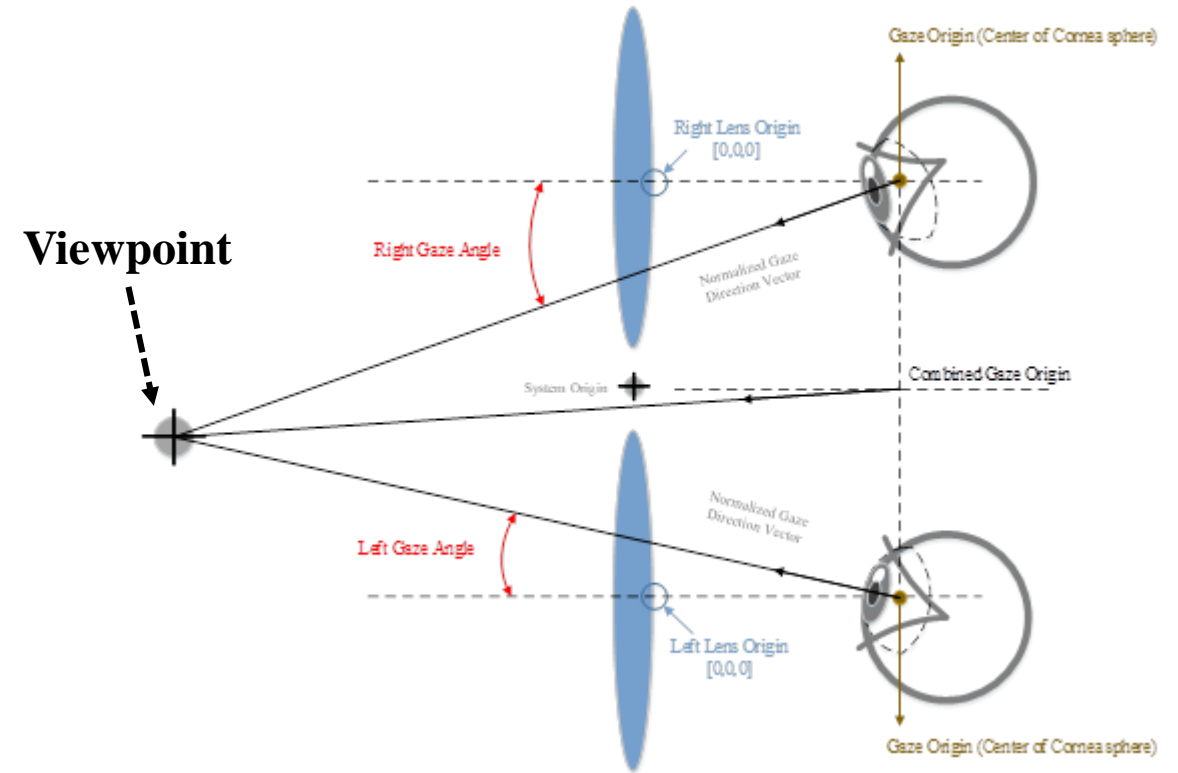# Method – Light Field Refocusing [1]

[1] Ng R, Levoy M, Brédif M, et al. Light field photography with a hand-held plenoptic camera[D]. Stanford University, 2005.
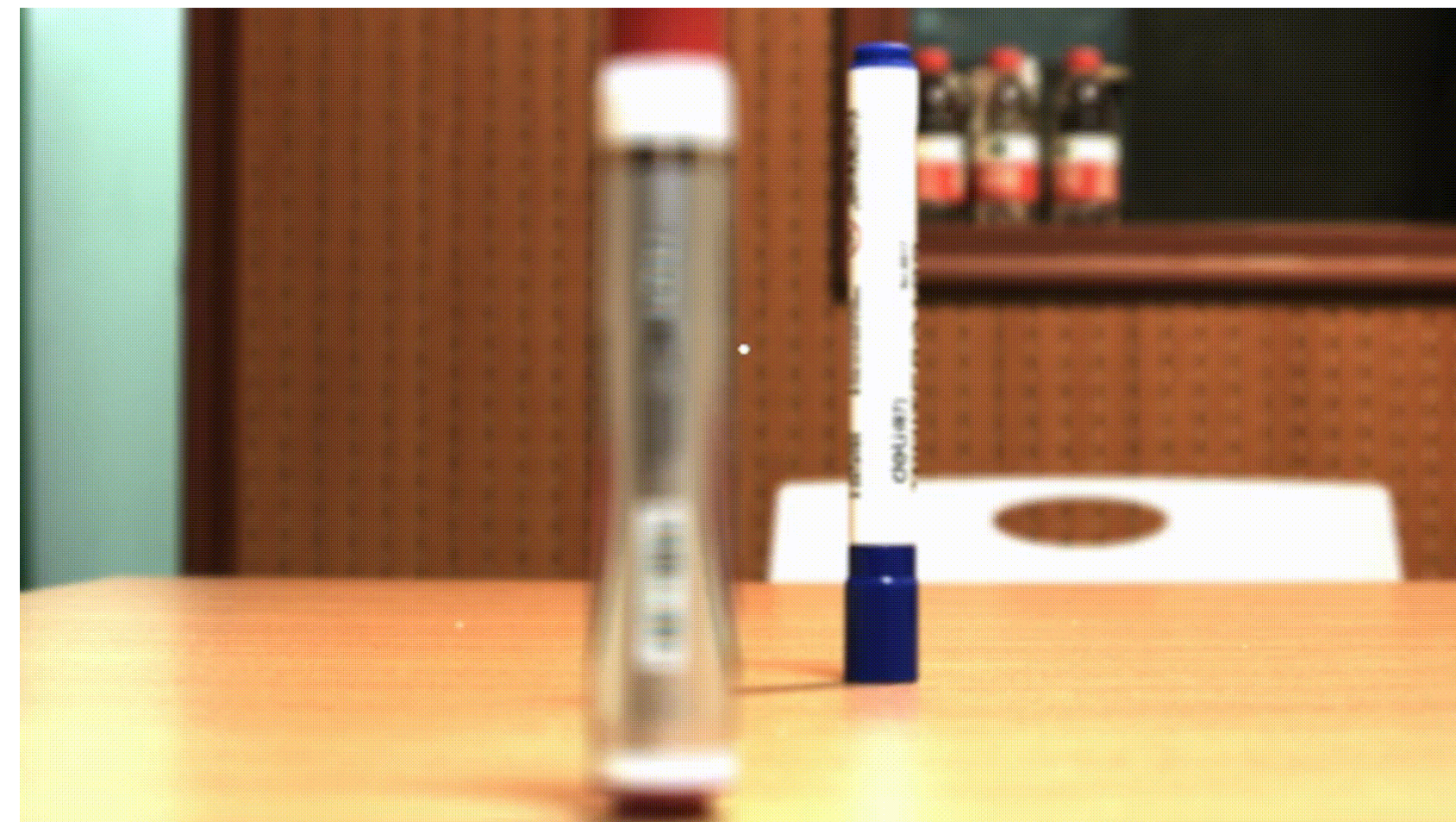
[2] The Standard Plenoptic Camera. Source:http://www.plenoptic.info/pages/sub-aperture.html

Method – Viewpoint Tracking [1]

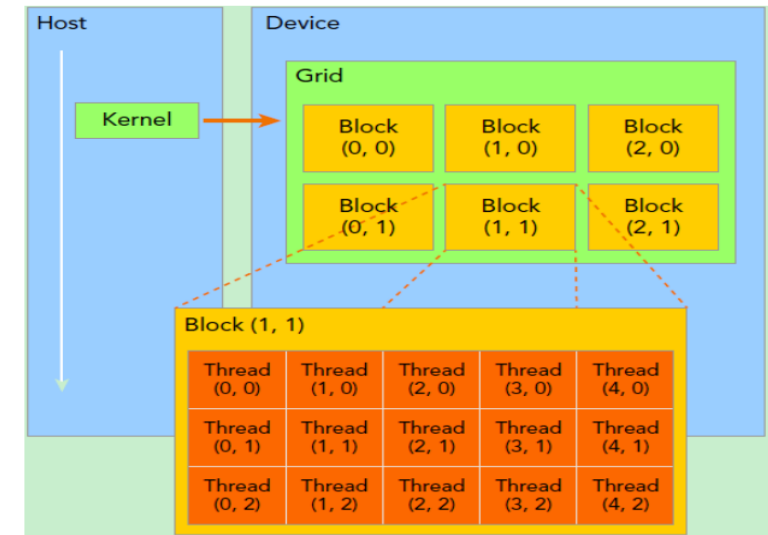[1] HMD: HTC VIVE Pro Eye ™ VR Brille Virtual Reality

Results

- Light Field Refocusing – CUDA Programming

- Viewpoint Tracking in VR HDMs

- The project was displayed at the 2020 Global Mobile Broadband Forum by Huawei.