Curriculum Vitae Youchao Wang

## **PUBLICATIONS**

[1] Andrew Kadis, **Youchao Wang**, Daoming Dong, Peter J. Christopher, Ralf Mouthaan, and Timothy D. Wilkinson. "HoloBlade: An Open-Hardware Spatial Light Modulator Driver Platform for Holographic Displays". In: *To appear in Applied Optics* (2020).

- [2] Andrew Kadis, Ralf Mouthaan, Peter J. Christopher, Daoming Dong, **Youchao Wang**, and Timothy D. Wilkinson. "Aberration Correction of a Ball-lens Holographic Projector using a Retroreflector Array". In: *In submission* (2020).
- [3] Daoming Dong, **Youchao Wang**, and Timothy D. Wilkinson. "Real-time parallel holographic foveated rendering for head-up displays". In: *In submission* (2020).
- [4] Vasileios Tsoutsouras, Sam Willis, **Youchao Wang**, and Phillip Stanley-Marbell. "Deriving Equations from Sensor Data Using Dimensional Function Synthesis". In: *To appear in Communications of the ACM* (2020).
- [5] Daoming Dong, **Youchao Wang**, Andrew Kadis, and Timothy D Wilkinson. "Cost-optimized heterogeneous FPGA architecture for non-iterative hologram generation". In: *Applied Optics* 59.25 (Sept. 2020), pp. 7540–7546. URL: http://ao.osa.org/abstract.cfm?URI=ao-59-25-7540.
- [6] **Youchao Wang** and Timothy D Wilkinson. "OASys: Envisioning an Opto-electronic Accelerator for Deep Learning Applications". In: *Frontiers in Optics / Laser Science*. Optical Society of America, 2020, FM7D.1. URL: http://www.osapublishing.org/abstract.cfm?URI=Fi0-2020-FM7D.1.
- [7] Daoming Dong, Andrew Kadis, **Youchao Wang**, and Timothy D Wilkinson. "Computer-Generated Fresnel Holograms Using Field Programmable Gate Arrays". In: *Imaging and Applied Optics Congress*. Optical Society of America, 2020, HF1D.3. URL: http://www.osapublishing.org/abstract.cfm?URI=DH-2020-HF1D.3.
- [8] Andrew Kadis, Daoming Dong, **Youchao Wang**, Peter Christopher, Ralf Mouthaan, and Timothy D Wilkinson. "HoloBlade: An Open Platform for Holography". In: *Imaging and Applied Optics Congress*. Optical Society of America, 2020, HF4D.4. URL: http://www.osapublishing.org/abstract.cfm?URI=DH-2020-HF4D.4.
- [9] Fan Yang, Youchao Wang, Ralf Mouthaan, and T D Wilkinson. "Holographic Rendering of a Real-World Scene Captured with a Low-cost RGB-D Camera". In: *Imaging and Applied Optics Congress*. Optical Society of America, 2020, HF4D.3. URL: http://www.osapublishing.org/abstract.cfm?URI=DH-2020-HF4D.3.
- [10] Youchao Wang, Daoming Dong, Peter J. Christopher, Andrew Kadis, Ralf Mouthaan, Fan Yang, and Timothy D. Wilkinson. "Hardware implementations of computer-generated holography: a review". In: *Optical Engineering* 59.10 (2020), p. 1.
- [11] Peter J Christopher, **Youchao Wang**, and Timothy D Wilkinson. "Predictive search algorithm for phase holography". In: *Journal of the Optical Society of America A* 36.12 (2019), pp. 2068–2075.
- [12] **Youchao Wang**, Daoming Dong, Andrew Kadis, Peter J Christopher, and Timothy D Wilkinson. "Computer-Generated Holography Using a Digital Signal Processor". In: *2019 IEEE Global Conference on Signal and Information Processing (GlobalSIP)*. Nov. 2019, pp. 1–5.
- [13] Daoming Dong, **Youchao Wang**, Peter J. Christopher, Andrew Kadis, and Timothy D. Wilkinson. "Fixed-point accuracy analysis of 2D FFT for the creation of computer generated holograms". In: 2019 IEEE Global Conference on Signal and Information Processing (GlobalSIP). 2019, pp. 1–5.
- [14] **Youchao Wang**, Sam Willis, Vasileios Tsoutsouras, and Phillip Stanley-Marbell. "Deriving equations from sensor data using dimensional function synthesis". In: *ACM Transactions on Embedded Computing Systems* 18.5s (2019).
- [15] Gregory Brooks, **Youchao Wang**, and Phillip Stanley-marbell. "Safeguarding Sensor Device Drivers Using Physical Constraints". In: *Proceedings of ACM EuroSys 2019 (poster)*. Dresden, 2019, p. 1.
- [16] **Youchao Wang**, S. M.Shariar Morshed Rajib, Chris Collins, and Bruce Grieve. "Low-Cost Turbidity Sensor for Low-Power Wireless Monitoring of Fresh-Water Courses". In: *IEEE Sensors Journal* 18.11 (2018), pp. 4689–4696.
- [17] Xiaoke Jiang, Jun Bi, **Youchao Wang**, and You Wang. "Interest Set Mechanism to Improve the Transport of Named Data Networking". In: *Proceedings of ACM SIGCOMM13 (poster)*. Hong Kong, China, 2013. URL: https://ndnsim.net/2.3/ndnsim-research-papers.html.

Curriculum Vitae Youchao Wang

[18] Xiaoke Jiang, Jun Bi, **Youchao Wang**, and You Wang. *Tech Report: Interest Set Mechanism to Improve the Transport of Named Data Networking Transport.* Tech. rep. Tsinghua University, 2013, pp. 1—8. URL: http://netarchlab.tsinghua.edu.cn/%7B~%7Dshock/THU-NetArchLab-ICN-TR-ISTSET-20130517.pdf.

[3] [5] Corresponding author.