

Introduction to **3D**imensional **O**ptical **T**echnology

Research theme: Future technologies in 3D camera and 3D display

3D depth extraction camera



3D holographic display



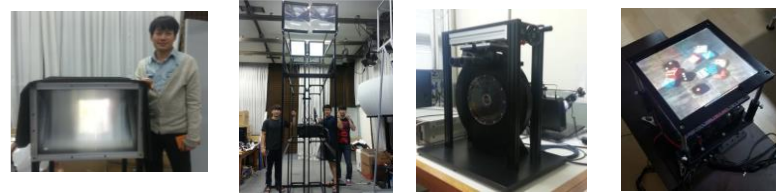
Image source: Prometheus (by Ridley Scott, 2012)

Pieces of work in 3DOT

Holographic display



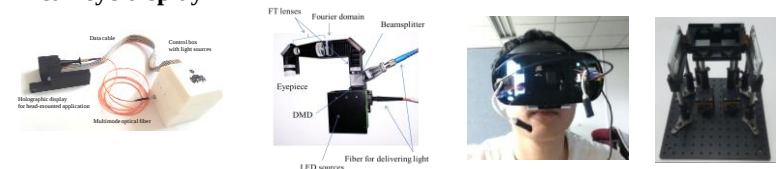
Projection 3D display



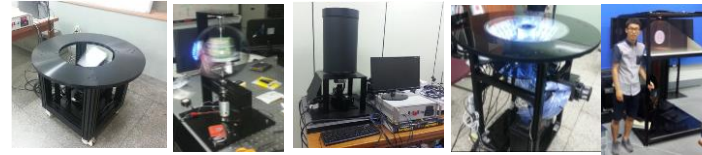
Head-up display



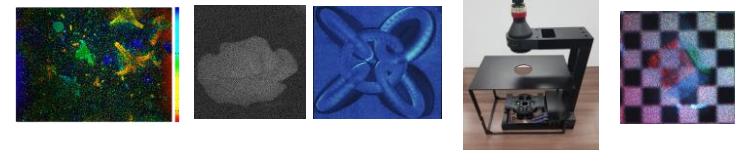
Near-eye display



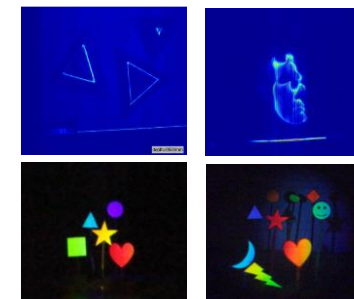
Volumetric display



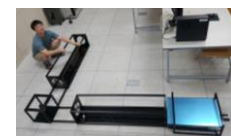
Holographic metrology



Depth sectioning and coloring



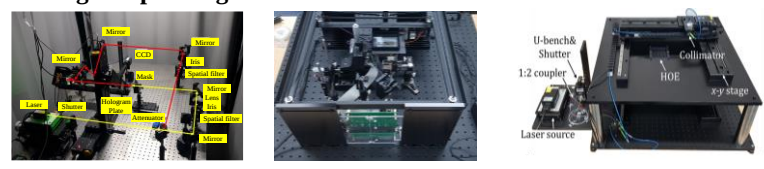
Pixel-matched pick-up



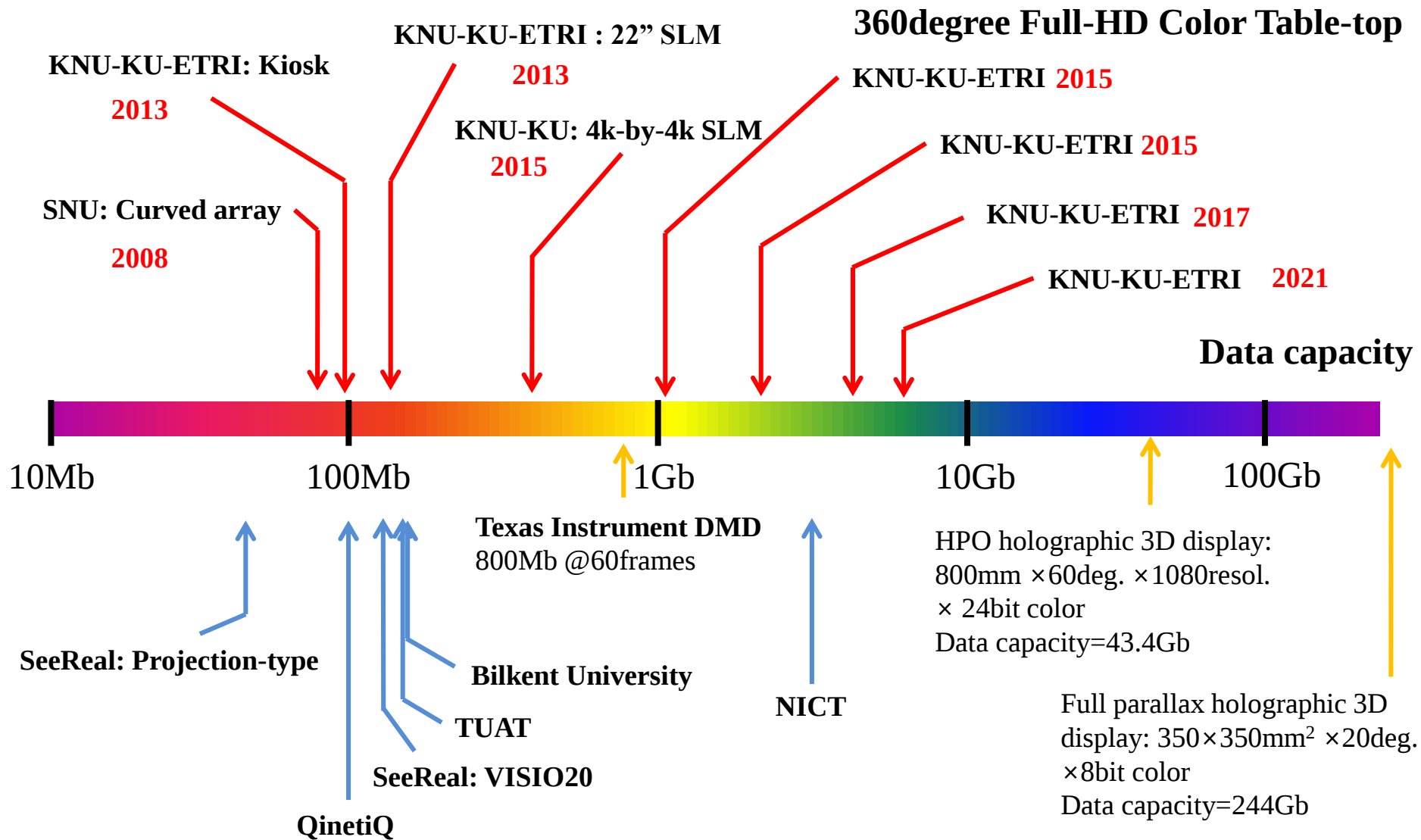
Modeling and Rendering



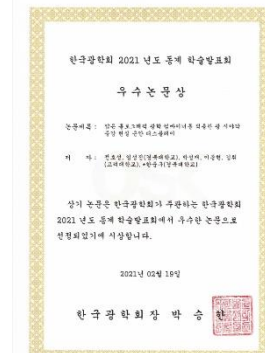
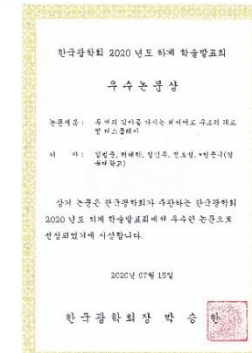
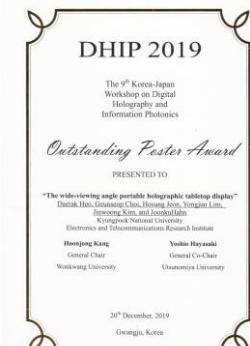
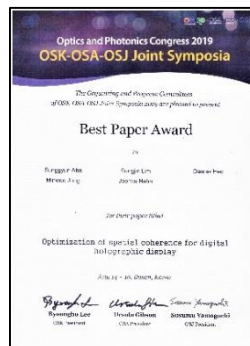
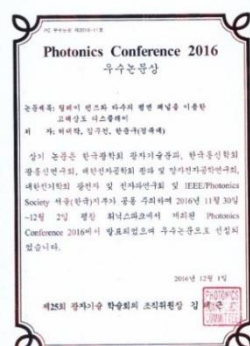
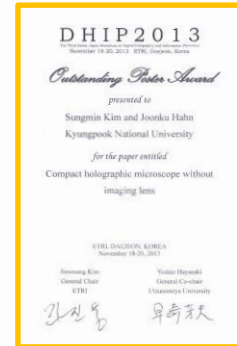
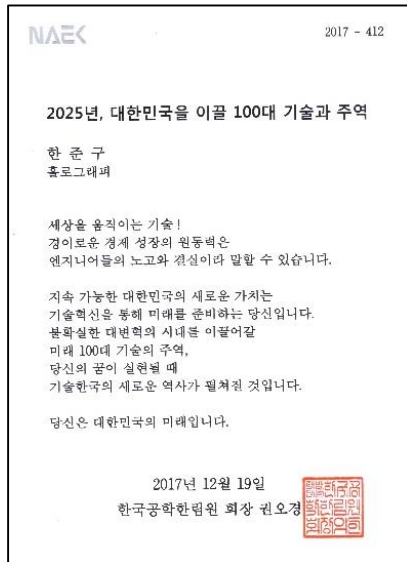
Hologram printing



Data capacity of holographic display



Honors and Awards



Activities for publicizing our researches



2013 IMID at Ilsan



2014 KES at Ilsan



2015 KES at Ilsan



2015 Open Lab.



2016 IMID at Jeju



2017 GHIF at Gumi



2017 DH at Jeju



2017 IMID at Busan



2017 DHIP at Daegu



2018 Nano Korea at Ilsan



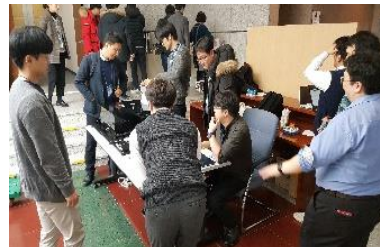
2018 IMID at Busan



2018 DHIP at Osaka



2019 IDIF at Istanbul



2019 DHIP at Gwangju



2020 OSK Summer at Busan



2021 IMID at Seoul

3DOT Moto: Fun & Happiness

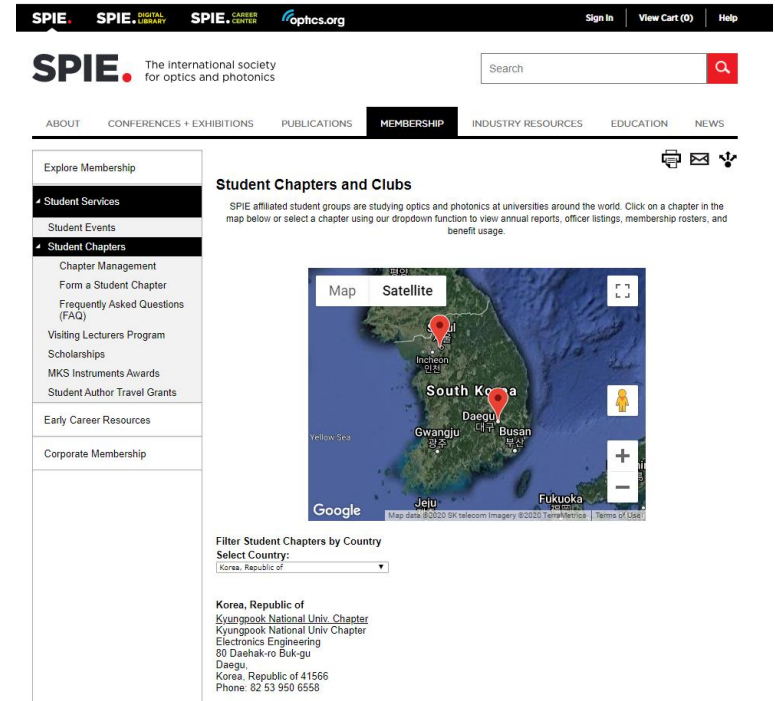
KNU OSA Student Chapter



The screenshot shows the OSA 100th Anniversary website. The header features the OSA logo and '100 Since 1916'. A navigation bar includes links like 'About OSA', 'Awards', 'Career', 'Directories', 'Video', 'Newroom', and 'Help'. Below this is a 'Chapters and Sections' section with a map of South Korea. A pop-up window for 'KYUNGPOOK NATIONAL UNIVERSITY' is visible, listing officers: President Sungjin Lim and Advisor Jooni Hahn.



KNU SPIE Student Chapter



The screenshot shows the SPIE website. The header includes the SPIE logo and 'The international society for optics and photonics'. A navigation bar includes links like 'ABOUT', 'CONFERENCES + EXHIBITIONS', 'PUBLICATIONS', 'MEMBERSHIP', 'INDUSTRY RESOURCES', 'EDUCATION', and 'NEWS'. Below this is a 'Student Chapters and Clubs' section with a map of South Korea. A pop-up window for 'KYUNGPOOK NATIONAL UNIVERSITY' is visible, listing officers: President Sungjin Lim and Advisor Jooni Hahn.

