

Name	Prof. Takeshi NAEMURA	Location	Hongo	Theme	VR/CHI
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Naemura Laboratory is working on the development of technology that contributes to the richness of the mind, through research and development of information media that promotes the founding chain of physics x information x humans. We have implemented universal theoretical systems with the foundation for physical control (optical design and circuit implementation), information processing (machine learning and signal processing), interaction design (behavior induction and evocation of emotion). Furthermore, we will link the new "experiences" of the people brought by the results to psychological evaluation and art expression.

■ Virtual Reality

As a sense of augmented reality (AR) and virtual reality (VR) technology in places where many people gather, we are conducting the following research to physically expand the real world.

- (1) Aerial imaging optical system that mixes real objects and images ([ReQTable](#), [AIR-range](#), [ViPlate](#), [GoThro](#), [EnchanTable](#), [HoVerTable PONG](#), [MARIO](#))
- (2) Embedding invisible data in videos ([LCD color modulation](#), [Pixel-level Visible Light Communication Projector](#))
- (3) Robust machine crowd control by projector light ([NavigaTorch](#), [Phyigital Field](#))
- (4) Support for HMD users in Metaverse (gaze guidance, multi-group appreciation assistance, drunk reduction)

■ Interaction Design

We are conducting the following research that triggers people's behavior for smooth communication in various situations.

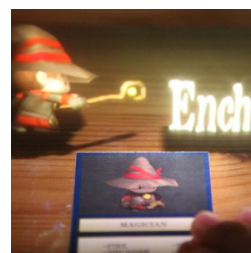
- (1) Online audio tools that switch between multi-person conversations and personal dialogue / Emotional expression in text chat (Switchie-Talkie, EmoBalloon)

- (2) Support for founding in group work ([NARUHODO Button](#), [SHelective Plus](#))
- (3) Communication support between visitors and museums ([Peaflet](#), [CoPlet](#))
- (4) Interaction design that promotes writing and learning ([EchoSheet/WriteMore](#))

■ Creativity Support

We are conducting the following research through creative projects such as [NAKAYAMA Future Factory](#), and [Shuri Castle Digital Reconstruction Project](#).

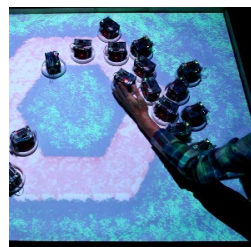
- (1) Application of 3D printers ([corobos](#), [3D Printing Firm Inflatables](#), [PneuModule](#))
- (2) Paper interface utilizing functional materials ([Inkantatory Paper](#), [Hand-rewriting](#))
- (3) Support tool for poster design / short video production
- (4) Exaggeration of images ([E-IMPACT/Manga-Perspective](#))



EnchanTable



PVLC



Phyigital Field



Switchie-Talkie



SHelective Plus



idea-thon for playing