



The Light Arrays project: The in-visible skirt and other imaginary things

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The *Light Arrays* project explores extension of the body through light. An array of visible LEDs and lasers project a dynamic representation of body movement and posture onto the environment to form an experiential bridge between what we see and what we feel or know about the dynamic, moving body. The suite of garments include *laser spine* the *in-visible skirt*, and *inertia LEDs*. Each embody different choreographic and topographic affordances. *laser spine* projects laser lights perpendicular to, and down the length of the spine. The complex technology in this interface is the body. The *In-visible Skirt*, a belt with laser modules and an independent controller, suggests a striped A-line skirt, which can move in response to the movements of the controller the way a skirt might move in response to body movement or other external factors. The separation of “skirt” and controller allows an extended body to be shared by two performers. Finally, the *inertia LEDs*, are arrays of LEDs sewn into body-worn modules and garments, programmed so that the lights reflect and respond to body movement through time. Iterations include a front of torso, and arm and leg bands programmed with a range of movement behaviours.

The *Light Arrays* system is open, and creates vacuums for self-discovery through movement. Rather than presenting a performance, we propose to provide the garment/interfaces to participants of SEAM2011 to examine together the affordances of the system. We will request volunteers wear the different garments and audience members actively engage by observing, and freezing the explorations at different times so that we may collectively move around and discuss the impact and affordances of light-based body extension from a range of perspectives.

The *Light Arrays* is relevant to all four SEAM2011 themes: Materials performed through the body – the body performed through materials; The temporal, transitional and transformational – momentum, light, pulse; The city performed – trajectories, traces, topographies; The activated body – new performative spaces.

N.B. The performative explorations may be undertaken indoors or outdoors, and require a fog machine.

Danielle Wilde, MA(RCA) thinks, writes, moves and makes to understand how technology might pair with the body to poeticise experience. Her research blurs boundaries between a number of disciplines and questions the divide between art and everyday life. In 2010 she was the inaugural Prime Minister’s Endeavour research scholar at the University of Tokyo. In 2011 she will complete a PhD in the poetics of embodied interaction, at Monash and CSIRO. Research concerns include: enchantment and ambiguity as resources for design; encouraging ‘magical thinking’ and ‘making strange’; physical, gestural and sensorial extension; co-creation and collaborative imagining; emergent performativity; poetics and play.

Alvaro Cassinelli is an inventor, media artist and academic researcher. He is Assistant Professor at the University of Tokyo (Ishikawa-Oku Laboratory) and the leader of the Meta-Perception group - a research unit specialized on Human-Computer Interfaces for enhancing human communication and expression. Openly experimenting in the field of Media Arts since 2004, he has been awarded several important prizes, including the Grand Prize [Art Division] at the 9th Japan Media Art Festival, an Excellence Prize [Entertainment Division] at the 13th Japan Media Art Festival, and an Honorary Mention at Ars Electronica 2006.