This research is in the field of interaction design for live performance. The use of multimedia technologies in dance has a long history dating back to the 19th Century. Since the 1980s, digital motion tracking technologies have become increasingly prevalent and performers are finding new ways to explore their use in live performance. Landmark works include David Rokeby’s *Very Nervous System* (1986), *Glow* (2006) and *Mortal Engine* (2008) by Chunky Move (Australia) and works by Troika Ranch (USA) and Palindrome (Germany). All feature live motion tracking systems linked to computer systems that produce interactive graphics.

The 35 minute interactive dance work, *Pixel Mountain*, developed in collaboration with Stalker Theatre, Sydney made use of large-scale projection technology and infra-red motion tracking techniques to produce an immersive environment for live performance.

Interactive real-time animations were projected onto and around the performance space, one of Gwacheon’s most iconic buildings and on the Seoul Museum of Art. Aerialists dance on the side of walls while real-time interactive projections respond to the dancers’ every move.

*Pixel Mountain* premiered at Gwacheon Festival and at Hi Seoul in Korea in September-October 2013. Additionally, it was featured at the Cervantino Festival, Mexico in October 2014 where it was seen by approximately 10,000 people.

*Pixel Mountain* received a 2013 Dept of Foreign Affairs and Trade Rehearsal and Production Grant of $33,000 and a 2013 Dept of Foreign Affairs and Trade: Australia-Korea Council Rehearsal and Production Grant of $13,000.00.
Performance of Pixel Mountain
ANDREW JOHNSTON
Pixel Mountain
Performance of Pixel Mountain
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Pixel Mountain

Pixel Mountain, Stalker Theatre and Marrugeku, Vimeo,
http://vimeo.com/76746676
Pixel Mountain is a new physical theatre work created in collaboration with Korean artists for presentation at the Gwangcheon Festival and Hi Seoul in Korea in September-October 2013. It is a 50-minute outdoor aerial and interactive projection work performed on one of Gwangcheon’s iconic buildings and on the Seoul Museum of Art. Aerialists dance on the side of walls while real-time interactive projections respond to the dancers’ every move.

The work brings together Stalker Theatre’s trademark physical theatre style with cutting edge new technology to create a fully immersive and interactive performance. It uses interactive 3D image and audio technologies to dynamically revision public spaces in real time through synthesising live performance, immersive interactive image projection and audio scapes.

Pixel Mountain is an innovative collaboration between high calibre digital artists, designers, software engineers and physical theatre artists. The team included two Stalker performers (Lee-Anne Litton, Rick Everett), two Korean performers (Hye-jin SHIN and Jin-young PARK), Stalker Artistic Director David Clarkson, Korean Assistant Director Ji-Hyun Lee, Australian digital artists Alejandro Rolandi, Chris Wilson, Andrew Johnston and Andrew Bluff, Korean composer Sang Won NAM, Korean costume designer Joon Hyeong SEO and Australian lighting designer Mike Smith.