
Pen-in-Hand Command: NUI for Real-Time Strategy eSports

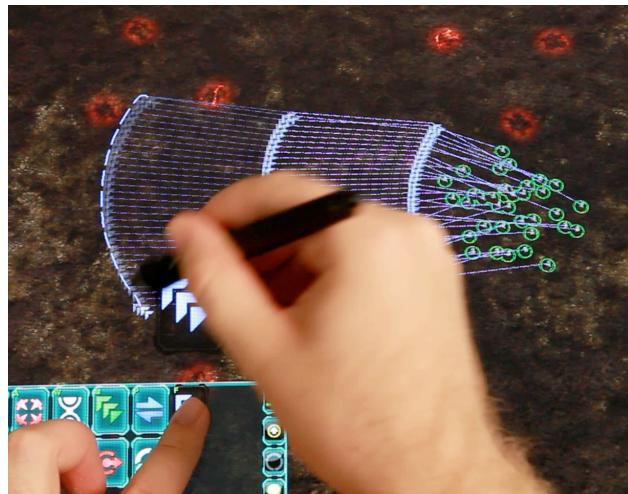


Figure 1. Using bi-manual mode selection via touch in conjunction with pen strokes to issue a series of formation commands. Enabling expressive and flexible issuing of unit commands.

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Abstract

Electronic Sports (eSports) is the professional play and spectating of digital games. Real-time strategy games are a form of eSport that require particularly high-performance and precise interaction. Prior eSports HCI has been keyboard and mouse based. We investigate the real-time strategy eSports context to design novel interactions with embodied modalities, because of its rigorous needs and requirements, and the centrality of the human-computer interface as the medium of game mechanics. To sense pen + multi-touch interaction, we augment a Wacom Cintiq with a ZeroTouch multi-finger sensor [1]. We used this modality to design new pen + touch interaction for play in real-time strategy eSports (See Figure 1).

Keywords

eSports; embodied interaction; real-time strategy games; multi-touch + pen

ACM Classification Keywords

H.5.2. User Interfaces: Input Devices and Strategies

References

- [1] Moeller, J., Kerne, A. 2012 ZeroTouch: An Optical Multi-Touch and Free-Air Interaction Architecture. *Proc. CHI 2012*. In Press.