AirPens: Musical Doodling

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1 Project Description

AirPens is an installation/activation that invites participants to make music while mark-making. NIME attendees are invited to reflect on this year's conference by doodling, scribbling or sketching onto a whiteboard with one of four AirPens – a gestural DMI that utilises IMU sensors to convert movement into sound. Part of the larger AirSticks project [1] which includes PCB design, 3D printing and fabrication developed at Monash University's SensiLab, the AirPen takes the physical affordance and potential of a whiteboard marker, and extends the marker's utility from simply converting movement with '2D mark-making,' to '3D music-making.' AirPens is designed as an ice-breaker experience, inviting attendees to share their thoughts on the state of NIME while improvising gestural music in small groups. While writing, participants may change the way they write to accommodate a different sonic output, or focus more on the 'sonification' of their natural writing style. But participants are not restricted to just writing with the AirPen – participants can explore the full scope of the AirPen as a gestural DMI away from the whiteboard, going off into free musical improvisations that may inspire discussions about the technology and project more generally. Each of the four AirPens available will have their own unique mapping that is in harmony with the other AirPens, inviting participants to freely go between writing ideas and improvising gestural music together.



Fig. 1. The AirPen being held

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2 Technical Notes

We will provide all equipment including laptop, devices, speakers, table and whiteboard. We ask for access to power and to ideally be set up at the registrations table, allowing us to interact with all conference participants.



Fig. 2. The AirPen

3 Program Notes

AirPens is an installation/activation that invites participants to make music while mark-making. NIME attendees are invited to reflect on this year's conference by doodling, scribbling or sketching onto a whiteboard with one of four AirPens — a gestural DMI that utilises IMU sensors to convert movement into sound. The AirPen takes the physical affordance and potential of a whiteboard marker, and extends the marker's utility from simply converting movement into '2D mark-making,' to '3D music-making.' AirPens is designed as an ice-breaker experience, inviting attendees to share their thoughts on the state of NIME while improvising gestural music in small groups. Each of the four AirPens available will have its own unique mapping that is in harmony with the other AirPens, inviting participants to freely go between writing ideas and improvising gestural music together.

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4 Ethical Standards

This project is being conducted with the necessary ethical consent and permissions through Monash University.

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References

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