

FootGest: Using Shoes as Input Devices

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ABSTRACT

Feet are often overlooked as a valid medium for input. To address this, we have developed FootGest, a pair of sensor-embedded shoes and a gesture recognition application. In this paper we describe how this system was developed, along with analysing its use as an input device.

Author Keywords

Gesture recognition; Machine Learning; Shoes; Gyroscope; Accelerometer

INTRODUCTION

Address issue

State our solution

RELATED WORK

blah blah Joe Paradiso blah blah Bristol PhD guy (maybe)

PROTOTYPE DESIGN

blah

Hardware

blah

Software

blah

Discrete Recognition (Machine Learning)

blah

Continuous Recognition

blah

APPLICATIONS

Disability, motion capture, general use (change music)

DISCUSSION AND FUTURE WORK

blah blah

CONCLUSION

blah blah

REFERENCES

1. Bamberg, S. J. M., Benbasat, A. Y., Scarborough, D. M., Krebs, D. E., and Paradiso, J. A. Gait analysis using a shoe-integrated wireless sensor system. *Information Technology in Biomedicine, IEEE Transactions on* 12, 4 (2008), 413–423.

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