

All



ADVANCED SEARCH

Conferences > 2009 VIII Brazilian Symposium... ?

gRmobile: A Framework for Touch and Accelerometer Gesture Recognition for Mobile Games

Publisher: IEEE

Cite This

PDF

Mark Joselli ; Esteban Clua [All Authors](#)

23

Cites in
Papers

17

Cites in
Patents

931

Full
Text Views

Abstract

Document Sections

- I. Introduction
- II. Related Work
- III. Framework Overview
- IV. Results evaluation
- V. Conclusion

Authors

Figures

References

Citations

Keywords

Metrics

Abstract:

Mobile phone games are usually design to be able to play using the traditional number pads of the handsets. This is stressfully difficult for the user interaction and consequently for the game design. Because of that, one of the most desired features of a mobile games is the usage of few buttons as possible. Nowadays, with the evolution of the mobile phones, more types of user interaction are appearing, like touch and accelerometer input. With these features, game developers have new forms of exploring the user input, being necessary to adapt or create new kinds of game play. With mobile phones equipped with 3D accelerometers, developers can use the simple motion of the device to control the game or use complex accelerated gestures. And with mobile phones equipped with the touch feature, they can use a simple touch or a complex touch gesture recognitions. For the gesture to be recognized one can use different methods like simple brute force gestures, that only works well on simple gestures, or more complex pattern recognition techniques like hidden Markov fields, fuzzy logic and neural networks. This work presents a novel framework for touch/accelerometer gesture recognition that uses hidden Markov model for recognition of the gestures. This framework can also be used for the development of mobile application with the use of gestures.

Published in: 2009 VIII Brazilian Symposium on Games and Digital Entertainment**Date of Conference:** 08-10 October 2009 **INSPEC Accession Number:** 11362981**Date Added to IEEE Xplore:** 07 June 2010**DOI:** 10.1109/SBGAMES.2009.24**Publisher:** IEEE**► ISBN Information:****Conference Location:** Rio de Janeiro, Brazil**► ISSN Information:**

I. Introduction

Digital games are defined as real-time multimedia applications that have time

Need
Full-Text
access to IEEE Xplore
for your organization?

[CONTACT IEEE TO SUBSCRIBE >](#)

More Like This

HMM-based gesture recognition system using kinect sensor for improvised human-computer interaction

2017 International Joint Conference on Neural Networks (IJCNN)
Published: 2017

Dynamic hand gesture recognition using hidden Markov models

2012 7th International Conference on Computer Science & Education (ICCSE)
Published: 2012

[Show More](#)

Get Published in the
*IEEE Open Journal of
Circuits and Systems*



Publisher: IEEE

► **ISBN Information:**

Conference Location: Rio de Janeiro,

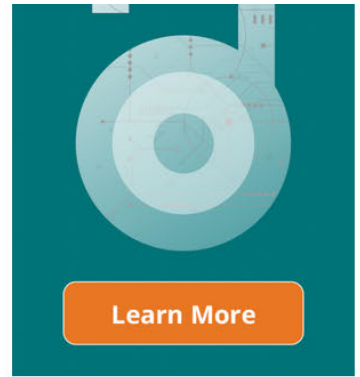
► **ISSN Information:**

Brazil

I. Introduction

Digital games are defined as real-time multimedia applications that have time constraints to run their tasks. If the game is not able to execute its processing under some time threshold, it will fail [1]. Mobile games are also real-time multimedia application that runs on mobile phones that have time constraints and many others constraints [2], when compared with desktop computers. Mobile devices have hardware constraints (processing power and screen size), user input (buttons, voice, touch screen and accelerometers); and different operating systems, like Android, iPhone OS, Symbian and Windows Mobile. This makes streamingly difficult for the design and development of

[Sign in to Continue Reading](#)



Authors

[Mark Joselli](#)

MediaLaboratory, IC-UFF, Brazil

[Esteban Clua](#)

MediaLaboratory, IC-UFF, Brazil

Figures

References

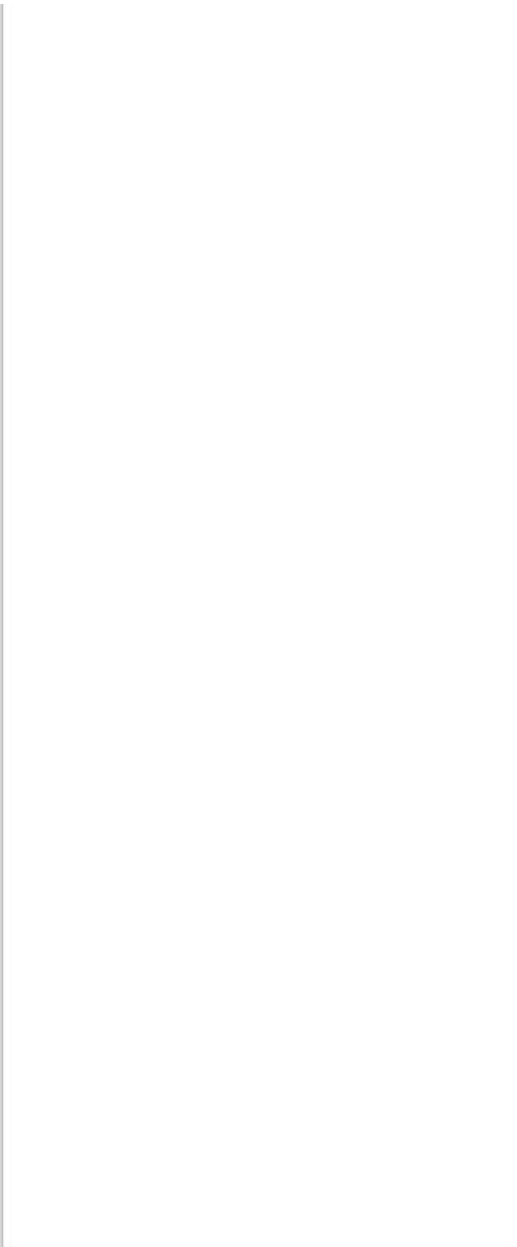
Citations

Keywords

Metrics

References

References is not available for this document.



IEEE Personal Account

CHANGE
USERNAME/PASSWORD

Purchase Details

PAYMENT OPTIONS
VIEW PURCHASED
DOCUMENTS

Profile Information

COMMUNICATIONS
PREFERENCES
PROFESSION AND EDUCATION
TECHNICAL INTERESTS

Need Help?

US & CANADA: +1 800 678
4333
WORLDWIDE: +1 732 981 0060
CONTACT & SUPPORT

Follow



[About IEEE Xplore](#) | [Contact Us](#) | [Help](#) | [Accessibility](#) | [Terms of Use](#) | [Nondiscrimination Policy](#) | [IEEE Ethics Reporting](#) | [Sitemap](#) | [IEEE Privacy Policy](#)
A not-for-profit organization, IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.

© Copyright 2023 IEEE - All rights reserved.