

Accepted Manuscript

A tensor-based approach to touch modality classification by using machine learning

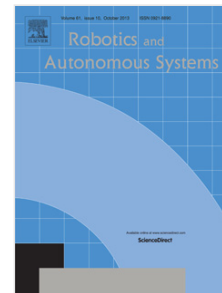
P. Gastaldo, L. Pinna, L. Seminara, M. Valle, R. Zunino

PII: S0921-8890(14)00207-3

DOI: <http://dx.doi.org/10.1016/j.robot.2014.09.022>

Reference: ROBOT 2355

To appear in: *Robotics and Autonomous Systems*



Please cite this article as: P. Gastaldo, L. Pinna, L. Seminara, M. Valle, R. Zunino, A tensor-based approach to touch modality classification by using machine learning, *Robotics and Autonomous Systems* (2014), <http://dx.doi.org/10.1016/j.robot.2014.09.022>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

- PVDF piezoelectric films have been used to build tactile sensor arrays
- ML based pattern-recognition system is designed to treat raw data in tensor form
- Different touch modalities have been collected involving 70 participants
- The adopted classification tools showed good performance on a three-class experiment

Download English Version:

<https://daneshyari.com/en/article/10326765>

Download Persian Version:

<https://daneshyari.com/article/10326765>

[Daneshyari.com](https://daneshyari.com)