

## Accepted Manuscript

Title: Predication of Different Stages of Alzheimer's Disease Using Neighborhood Component Analysis and Ensemble Decision Tree

Authors: Mingwu Jin, Weishu Deng



PII: S0165-0270(18)30044-X  
DOI: <https://doi.org/10.1016/j.jneumeth.2018.02.014>  
Reference: NSM 7952

To appear in: *Journal of Neuroscience Methods*

Received date: 2-8-2017  
Revised date: 18-2-2018  
Accepted date: 20-2-2018

Please cite this article as: Jin Mingwu, Deng Weishu. Predication of Different Stages of Alzheimer's Disease Using Neighborhood Component Analysis and Ensemble Decision Tree. *Journal of Neuroscience Methods* <https://doi.org/10.1016/j.jneumeth.2018.02.014>

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.

# Predication of Different Stages of Alzheimer's Disease Using Neighborhood Component Analysis and Ensemble Decision Tree

Running title: Predication Using NCA and Ensemble Tree

Mingwu Jin\* and Weishu Deng

*Department of Physics, University of Texas at Arlington, Arlington, TX, 76019*

\*Correspondence to:

Mingwu Jin, Ph.D.

Univ. of Texas at Arlington

Dept. of Physics

502 Yates Street

BOX 19059

Arlington, TX 76019

Email: mingwu@uta.edu

Phone: 817-272-6262

Fax: 817-272-3637

## Highlights:

- The neighborhood component analysis (NCA) is proposed for feature selection of MRI measures.
- NCA combined with the boosting tree achieves better prediction performance than other methods.
- The best prediction accuracy for four stages of Alzheimer's disease is 56.25%.

Download English Version:

<https://daneshyari.com/en/article/8840348>

Download Persian Version:

<https://daneshyari.com/article/8840348>

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