

自适应组合型盲源分离算法及其优化方案

欧世峰*^① 高颖^① 赵晓晖^{②*}

^①(烟台大学光电信息科学技术学院 烟台 264005) ^②(吉林大学通信工程学院 长春 130012)

Adaptive Combination Algorithm and Its Modified Scheme for Blind Source Separation

Ou Shi-feng^① Gao Ying^① Zhao Xiao-hui^{②*}

^①(Institute of Science and Technology for Opto-electronic Information, Yantai University, Yantai 264005, China)

^②(College of Communication Engineering, Jilin University, Changchun 130012, China)

摘要

参考文献

相关文章

Download: PDF (372KB) HTML 1KB Export: BibTeX or EndNote (RIS) Supporting Info

摘要 该文通过引入滑动参数来自适应地组合两个不同步长的盲源分离系统, 提出了一种自适应组合型盲源分离算法, 其可在两个系统并向运行的同时, 自适应地选取最优的分离系统进行在线分离。文中推导了滑动参数的自适应更新规则, 并针对算法存有的问题, 提出了具体优化方案。平稳和非平稳环境下的仿真实验表明了算法的优良性能。

关键词: 信号处理 盲源分离 步长 自适应 滑动参数

Abstract: By adaptively combining two separation systems with different step sizes, an adaptive combination algorithm is proposed for blind source separation. A smoothing parameter is used to adjust the proportion of the two systems in an attempt to put together the best properties of them. The adaptive updating rule for the smoothing parameter is obtained, and in view of the insufficiency of the proposed method, a concrete modified scheme is also presented. Experimental results demonstrate the good performance of the proposed approaches in stationary and non-stationary conditions.

Keywords: Signal processing Blind source separation Step size Adaptive Smoothing parameter

Received 2010-08-14;

本文基金:

国家自然科学基金(61005021)和高等学校博士学科点基金(200801830037)资助课题

通讯作者: 欧世峰 Email: ousfeng@126.com

引用本文:

欧世峰, 高颖, 赵晓晖. 自适应组合型盲源分离算法及其优化方案[J] 电子与信息学报, 2011, V33(5): 1243-1247

Ou Shi-Feng, Gao Ying, Zhao Xiao-Hui. Adaptive Combination Algorithm and Its Modified Scheme for Blind Source Separation[J], 2011, V33(5): 1243-1247

链接本文:

http://jeit.ie.ac.cn/CN/10.3724/SP.J.1146.2010.00871 或 http://jeit.ie.ac.cn/CN/Y2011/V33/I5/1243

Service

- ▶ 把本文推荐给朋友
- ▶ 加入我的书架
- ▶ 加入引用管理器
- ▶ Email Alert
- ▶ RSS

作者相关文章

- ▶ 欧世峰
- ▶ 高颖
- ▶ 赵晓晖