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## 首页 (/)

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教师名录



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个人主页

## 教育背景

2012.03-2015.06 上海交通大学机械工程系 博士  
2009.09-2012.03 上海交通大学机械工程系 硕士  
2005.09-2009.06 华侨大学机械工程系 学士

## 工作经历

2019.02-至今 上海交通大学

2015.05-2019.01 上海交通大学 博士后

2016.09-2018.09 The University of Iowa 博士后

## 出访及挂职经历

2016.09-2018.09 The University of Iowa 博士后

## 研究方向

故障诊断

损伤检测

系统辨识

机器学习

深度学习

信号处理

人工智能

机械振动

招收相关专业硕、博士研究生，欢迎联系！

## 科研项目

国家自然科学基金面上项目(主持)

国家自然科学基金青年项目(主持)

上海市浦江人才支持计划(A类)

上海市自然科学基金(主持)

博士后特别资助(主持)

博士后面上项目(主持)

国家重点实验室重点项目(主持)

## 代表性论文专著

C. Cheng, E. Bai, Z. Peng, Variable Selection According to Goodness of Fit in Nonparametric Nonlinear System Identification, IEEE Transactions on Automatic Control, Accepted, 2020.

B. Zhao, C. Cheng\*, Z. Peng, X. Dong, G. Meng, Detecting the early damages in structures with nonlinear output frequency response functions and the CNN-LSTM model, IEEE

Transactions on Instrumentation and Measurement, Preprint, 2020.

C. Cheng, E. Bai, Z. Peng, Identification of Sparse Volterra Systems, IEEE Transactions on Automatic Control, Accepted, 2020.

[1] C. Cheng, E. Bai, Z. Peng, Consistent Variable Selection for a High-Dimensional Nonparametric Nonlinear System by Inverse and Contour Regression, IEEE Transactions on

Automatic Control, 2019, 64: 2653-2664.

[2] C. Cheng, E. Bai, Z. Peng, Testing If A Nonlinear System Is Additive Or Not, Automatica, 2019, 104: 134-140.

[3] C. Cheng, E. Bai, Z. Peng, Ranking the Importance of Variables in Nonlinear System Identification, Automatica, 2019, 103: 472-479.

[4] C. Cheng, X. Dong, Z. Peng, W. Zhang, G. Meng, Kautz basis expansion-based Hammerstein system identification through separable least squares method, Mechanical Systems

and Signal Processing, 2019, 121: 929-941.

[5] E. Bai, C. Cheng, W. Zhao, Variable Selection of High-Dimensional Non-Parametric Nonlinear Systems by Derivative Averaging to Avoid the Curse of Dimensionality, Automatica,

2019, 101: 138-149.

[6] C. Cheng, E. Bai, Ranking Variables in Nonlinear Nonparametric Additive System Identification, IFAC-PapersOnLine, 2018, 51(15), 1-6.

[7] C. Cheng, Z. Peng, X. Dong, W. Zhang, G. Meng, Impulse response function identification of linear mechanical systems based on Kautz basis expansion with multiple poles.

International Journal of Systems Science, 2018, 49 (7) 1559-1571.

[8] E. Bai, C. Cheng, A Data-Driven Basis Function Approach in Non-Parametric Nonlinear System Identification, Uncertainty in Complex Networked Systems, 2018, 1-47.

[9] C. Cheng, Z. Peng, X. Dong, W. Zhang, G. Meng, Nonlinear System Identification Using Kautz Basis Expansion-based Volterra-PARAFAC model, Nonlinear dynamics, 2018, 94(3),

2277-2287.

[10] C. Cheng, Z. Peng, W. Zhang, G. Meng, Volterra-series-based nonlinear system modeling and its engineering applications: A state-of-the-art review. Mechanical Systems and

Signal Processing, 2017, 87: 340-364.

[11] C. Cheng, Z. Peng, X. Dong, W. Zhang, G. Meng, A novel approach for identification of cascade of Hammerstein model. Nonlinear Dynamics, 2016, 86(1): 513-522.

[12] Y. Deng, C. Cheng, Y. Yang, Z. Peng. Parametric Identification of Nonlinear Vibration Systems Via Polynomial Chirplet Transform. Journal of Vibration and Acoustics, 2016, 138(5):

051014.

[13] C. Cheng, Z. Peng, X. Dong, W. Zhang, G. Meng, A novel damage detection approach by using Volterra kernel functions based analysis. Journal of the Franklin Institute, 2015,

352(8): 3098-3112.

[14] C. Cheng, Z. Peng, X. Dong, W. Zhang, G. Meng, Analysis of locally nonlinear two dimensional periodic structures using NOFRFs. Vibration Engineering and Technology of

Machinery, 2015, 23: 811-823.

[15] C. Cheng, Z. Peng, W. Zhang, G. Meng, Wavelet basis expansion-based Volterra kernel function identification through multilevel excitations. Nonlinear Dynamics, 2014, 76(2):

985-999.

[16] C. Cheng, Z. Peng, X. Dong, W. Zhang, G. Meng, Locating nonlinear components in two dimensional periodic structures based on NOFRFs. International Journal of Nonlinear

Mechanics, 2014, 67:198-208.

[17] C. Cheng, Z. Peng, W. Zhang, G. Meng, Wavelet basis expansion-based spatio-temporal Volterra kernels identification for nonlinear distributed parameter systems. Nonlinear

Dynamics, 2014, 78(2): 1179-1192.

[18] 彭志科, 程长明. Volterra级数理论研究进展与展望. 科学通报, 2015, 60: 1874-1888.

[19] 程长明, 彭志科, 孟光. 一类非线性系统的随机振动频率响应分析研究. 力学学报, 2011, 43(5): 905-913.

## 学术兼职

Reviewer of Automatica, IEEE Transactions on Automatic Control and IEEE Transactions on Signal Processing et al.

网站声明 (/website\_statement.html)|友情链接 (<http://www.sjtu.edu.cn>)|联系我们 (/political\_institution.html)|流量统计 (<https://tongji.baidu.com/web/welcome/ico?s=ef79253218ce7df1e696e4341a355bbd>)

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