

## & 个人资料

姓名: 陈瀚宁                      性别: 男  
民族: 汉                          生日: 1979年3月  
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最高学历: 工学博士              毕业学校: 中国科学院研究生院  
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## & 主要研究领域

- ◇ 智能计算及其应用 生物启发式计算
- ◇ 物联网技术与应用 电力系统优化 产品优化设计
- ◇ 物流与供应链管理 生产计划与控制
- ◇ 复杂系统建模与计算 生物信息学
- ◇ 印制电子 3D 打印技术

## & 教育经历及工作经历

- ◇ 2014.11—                      天津工业大学计算机科学与软件学院教授、博导
- ◇ 2009.01—2014.10              中国科学院沈阳自动化研究所历任助理研究员、副研究员、硕士生导师、青年博导
- ◇ 2005.09—2008.12              中国科学院沈阳自动化研究所机械电子工程专业攻读博士
- ◇ 2002.09—2005.07              燕山大学计算机软件与理论专业攻读硕士
- ◇ 1998.09—2002.07              燕山大学机械工程及其自动化专业攻读学士

## & 主持及参与项目

- ◇ 2012年1月, 基于生物行为的RFID系统优化模型与算法研究, 国家自然科学基金青年项目(61105067), **项目主持人 (在研)**
- ◇ 2012年1月, 基于智能终端的互动社区服务平台与应用示范, 国家科技支撑计划项目(2012BAH15F05), **项目主持人 (在研)**
- ◇ 2012年1月, 中国科学院创新促进会人才基金(Y2A1062701), **项目主持人 (在研)**
- ◇ 2012年6月, 乐从家具商贸产业全程电子商务服务平台建设, 佛山市院市合作项目

- (2012HY100643), 项目主持人 (在研)
- ◇ 2012 年 6 月, 基于物联网的家具商贸综合服务平台研发与应用示范, 佛山市院市合作项目 (2012HY100523), 项目主持人 (在研)
  - ◇ 2011 年 4 月, 面向中小企业的云制造服务平台研发及应用, 国家 863 计划课题 (2011AA040605), 项目主持人 (结题)
  - ◇ 2009 年 3 月, 基于 RFID 的南通蕾丝妮针织服饰有限公司生产管理系统, 企业委托课题 (Y2N715), 项目主持人 (结题)
  - ◇ 2012 年 1 月, 基于细菌行为模式的复杂系统建模与优化方法研究, 国家自然科学基金面上项目 (61174164), 第二负责人 (在研)
  - ◇ 2011 年 10 月, 面向乐从家具商贸的物联网服务平台建设, 佛山市科技发展专项资金 (2011AA100553), 核心参与人员 (在研)
  - ◇ 2011 年 6 月, 乐从家具物联网服务平台建设, 佛山市院市合作项目 (2011BY100383), 核心参与人员 (结题)
  - ◇ 2009 年 6 月, RFID 标签动态信息实时管理软件的研究与开发 (国家 863 项目, 2008AA04A105), 核心参与人员 (结题)
  - ◇ 2007 年 12 月, 面向 RFID 的信息集成管理技术研究与开发, 国家 863 计划课题 (2006AA04A117), 核心参与人员 (结题)
  - ◇ 2006 年 9 月, 复杂生产制造过程实时、智能控制与优化理论和方法研究, 973 国家重大基础研究项目 (2002CB312200), 核心参与人员 (结题)

## & 发表论文

### 专著:

- [1] 生物启发计算一个体 群体 群落演化模型与方法. 朱云龙, 陈瀚宁, 清华大学出版社, 2013 年 (ISBN 978-7-302-31908-5).

### 学术论文:

- [1] **Chen, H.N.** (陈瀚宁), Zhu Y.L. et al., Bacterial colony foraging for multi-mode product colour planning, International Journal of Bio-Inspired Computation, Vol. 7, No. 4, 2015. (Accepted, **SCI IF=3.969**)

- [2] Ma, L.B., Zhu, Y.L., Hu, K.Y., **Chen H.N.** (陈瀚宁), A hybrid artificial bee colony optimizer by combining with life-cycle, Powell's search and crossover, *Applied Mathematics and Computation*, 2015, 252: 133-154, (**SCI IF=1.551**).
- [3] Jing S.K, Ma L.B., Zhu Y.L., **Chen H.N.** (陈瀚宁, 通信作者), A restructured artificial bee colony optimizer combining life-cycle, local search and crossover operations for droplet property prediction in printable electronics fabrication, *Journal of Intelligent Manufacturing*, 27 May 2015, pp 1-26, (**SCI, IF = 1.731**).
- [4] He M.W. , Sun L.L., Hu K.Y., Zhu Y.L., **Chen H.N.** (陈瀚宁, 通信作者), Analysis of DoD inkjet printhead performance for printable electronics fabrication using dynamic lumped element modeling and swarm intelligence based optimal prediction, *Journal Central South University*. (2015) 22: 3925–3934, (**SCI, IF = 0.551**).
- [5] **Chen, H.N.** (陈瀚宁), Zhu, Y.L. et al. Bacterial Colony Foraging Algorithm: Combining Chemotaxis, Cell-to-cell Communication, and Self-adaptive Strategy, *Information Sciences*, 2014,273: 73-10, (**SCI, IF = 3.242**).
- [6] **Chen H.N.** (陈瀚宁), Zhu Y.L. et al., Multi-Hive Bee Foraging Algorithm for Multi-objective Optimal Power Flow Considering the Cost, Loss, and Emission, *International Journal of Electrical Power & Energy Systems*, 2014, 60: 203-220, (**SCI, IF = 3.432**).
- [7] **Chen H.N.** (陈瀚宁), Zhu Y.L. et al. Multi-colony bacteria foraging optimization with cell-to-cell communication for RFID network planning, *Applied Soft Computing*, 2010, 10(2): 539-547, (**SCI, IF = 2.810**).
- [8] **Chen H.N.** (陈瀚宁), \*Niu, B; Ma, L.B.; Su, W.X.; Zhu, Y.L., Bacterial colony foraging optimization, *Neurocomputing*, 2014,137: 268–284, (**SCI, IF = 2.083**).
- [9] Ma, L.B.; Zhu, Y.L.; Hu, K.Y.; \***Chen, H.N.** (陈瀚宁, 通信作者), Cooperative artificial bee colony algorithm for multi-objective RFID network planning, *Journal of Network and Computer Applications*, 2014, 42: 143–162, (**SCI, IF = 2.229**).
- [10] [8] Chen H.N. (陈瀚宁), Zhu Y.L. et al., Multiobjective RFID Network Optimization Using Multiobjective Evolutionary and Swarm Intelligence Approaches, *Mathematical Problems in Engineering*, 2014, 2014: 1–13, (**SCI: 608CH, IF=1.383**).
- [11] **Chen H.N.** (陈瀚宁), Zhu Y.L. et al. Bacterial Colony Foraging Optimization. *Neurocomputing*. Aug 2012. (**SCI IF=1.58**)

- [12] **Chen H.N.** (陈瀚宁), Zhu Y.L. A Discrete Multi-swarm Optimizer for RFID Network Scheduling. *Journal of Central South University*. Aug 2012. ( **SCI IF=0.564**)
- [13] Liu W., Niu B., Zhu Y.L., **Chen H.N.** (陈瀚宁, 通讯作者) Artificial Bee Colony Algorithm for Reader Collision Problem in RFID Network. *Journal of Computational and Theoretical Nanoscience*. 2013, 10(12). ( **SCI IF= 0.912**)
- [14] Liu W., Niu B., Zhu Y.L., **Chen H.N.** (陈瀚宁, 通讯作者) Robot Path Planning Using a Self-adaptive Bacterial Foraging Algorithm. *Journal of Computational and Theoretical Nanoscience*. 2013, 10(12). ( **SCI IF= 0.912**)
- [15] **Chen H.N.** (陈瀚宁), Zhu Y.L. Bacterial Colony Foraging Model: combing chemotaxis, Cell-to-cell Communication, and Self-adaptive strategy. *Journal of Investigative Medicine*. 2013, 61(4): S9-S9. ( **SCI: 151RJ, IF=1.964**)
- [16] **Chen H.N.** (陈瀚宁), Zhu Y.L. A Lifecycle Model for Simulating Bacterial Colony Evolution. *Journal of Investigative Medicine*. 2013, 61(4): S25-S25. ( **SCI: 151RJ, IF=1.964**)
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- [18] Ma L.B., Hu K.Y., Zhu Y.L., **Chen H.N.** (陈瀚宁, 通讯作者) Computational Evolution of Social Behavior in Bacterial Colony Optimization Model. *Journal of Pure and Applied Microbiology*. 2013, 7(Special Edition): 487-493. ( **SCI IF=0.065**)
- [19] **Chen H.N.** (陈瀚宁), Zhu Y.L., Hu K.Y., Ding M, Su, W.X. A Novel Bacterial Foraging Algorithm For Multi-working Mode Product Color Planning. *Information-An International Interdisciplinary Journal*. 2012, 15(1): 123-130. ( **SCI: 912OO, IF=0.358**)
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- [22] **Chen H.N.** (陈瀚宁), Zhu Y.L., Hu K.Y., Ku T. RFID network planning using a

- multi-swarm optimizer. *Journal of Network and Computer Applications*. 2011, 34(3): 888-901. ( **SCI: 745BB, IF=1.467**) (引用 15 次, Google Scholar)
- [23] **Chen H.N.** (陈瀚宁), Zhu Y.L., Hu K.Y. Adaptive Bacterial Foraging Optimization. *Abstract and Applied Analysis*. 2011, Article ID 108269, 27 pages. ( **SCI: 867BN, IF=2.221**) (引用 11 次, Google Scholar)
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- [25] **Chen H.N.** (陈瀚宁), Zhu Y.L., Hu K.Y. Discrete and Continuous Optimization based on Multi-swarm Coevolution. *Natural Computing*. 2010, 9(3): 659-682. ( **SCI: 639AH**) (引用 8 次, Google Scholar)
- [26] **Chen H.N.** (陈瀚宁), Zhu Y.L., Hu K.Y. Multi-colony bacteria foraging optimization with cell-to-cell communication for RFID network planning. *Applied Soft Computing*. 2010, 10(2): 539-547. ( **SCI: 525HT IF=2.140**) (引用 40 次, Google Scholar)
- [27] **Chen H.N.** (陈瀚宁), Zhu Y.L., Hu K.Y. Hierarchical Swarm Model: A New Approach to Optimization. *Discrete Dynamics in Nature and Society*. 2010, Article ID 379649, 30 pages. ( **SCI: 602NV, IF=1.577**) (引用 9 次, Google Scholar)
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- [29] Ding M., Sun W., **Chen H.N.** (陈瀚宁). Multi-Working Modes Product-Color Planning Based on Evolutionary Algorithms and Swarm Intelligence. *Mathematical Problems in Engineering*. 2010, Article ID 871301, 15 pages. ( **SCI: 608CH, IF=1.383**)
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- [31] **Chen H.N.** (陈瀚宁), Zhu Y.L., Hu K.Y. Cooperative Bacterial Foraging Optimization. *Discrete Dynamics in Nature and Society*. 2009, Article ID 815247, 17 pages. ( **SCI: 517ZD, IF=1.577**) (引用 33 次, Google Scholar)
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- Applied Mathematics and Computation*. 2008, 205(1): 47-60. (SCI: 367XM IF=1.349) (引用 22 次, Google Scholar)
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- On Von Neumann Topology Structure. *Proceedings of 2010 3rd International Conference on Computer and Electrical Engineering, ICCEE'10*. 2010. (EI)
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- Knowledge Engineering, ISKE'08*. 2008, 1026-1031. (EI: 20090911922469)
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- [53] **Chen H.N.** (陈瀚宁), Zhu, Y.L., Hu, K.Y., Niu, B. Application of a Multi-Species Optimizer in Ubiquitous Computing for RFID Networks Scheduling. *Proceedings of 3rd International Conference on Natural Computation*. 2007, 420-425. (EI: 080311026604)
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## 杂志及会议审稿

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|--|--------|
| ◇ IEEE Transactions on Industrial Informatics        | 常年评审专家 |
| ◇ IEEE Transactions on Evolutionary Computation      | 常年评审专家 |
| ◇ IEEE Transactions on Magnetics                     | 常年评审专家 |
| ◇ IEEE Transactions on Systems, Man, and Cybernetics | 常年评审专家 |
| ◇ Soft Computing                                     | 常年评审专家 |
| ◇ Applied Mathematics and Computation                | 常年评审专家 |
| ◇ Swarm Intelligence                                 | 常年评审专家 |
| ◇ Neurocomputing                                     | 常年评审专家 |
| ◇ ISA Transactions                                   | 常年评审专家 |
| ◇ Journal of the Franklin Institute                  | 常年评审专家 |
| ◇ Journal of Network and Computer Applications       | 常年评审专家 |
| ◇ 控制理论与应用  | 常年评审专家 |
| ◇ 信息与控制  | 常年评审专家 |
| ◇ 系统工程理论与实践  | 常年评审专家 |



- ◇ 系统工程与电子技术 常年评审专家
- ◇ 系统工程学报 常年评审专家

## & 获奖及荣誉情况

- ◇ 2013 年 4 月获辽宁省“省级科学技术研究成果”
- ◇ 2013 年 1 月获中科院沈阳自动化研究所“创新 2020 冠名奖-前沿研究奖”
- ◇ 2012 年 1 月入选“中国科学院青年创新促进会”
- ◇ 2010 年 1 月获中科院沈阳自动化研究所“知识创新工程冠名奖”
- ◇ 2009 年 10 月获“辽宁省自然科学学术成果一等奖”
- ◇ 2009 年 8 月获中国科学院沈阳自动化所“优秀博士论文”
- ◇ 2005 年 7 月获燕山大学研究生院“优秀毕业生”
- ◇ 2004 年 7 月获燕山大学研究生院“优秀团干部”
- ◇ 2003 年 7 月获燕山大学研究生院“优秀学生”