

SERGIO A. SALINAS

CONTACT INFORMATION

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RESEARCH INTERESTS

Cybersecurity, big data, cyberphysical systems, cloud computing, online social networks, and wireless networks

TEACHING INTERESTS

Network security, computer networks, wireless networks, wireless communications, computer communications

EDUCATION

9/2010 – 6/2015 *Mississippi State University* Mississippi State, MS
Ph.D. in Electrical and Computer Engineering

9/2006 – 5/2010 *Jackson State University* Jackson, MS
B.S. in Telecommunications Engineering

ACADEMIC APPOINTMENTS

8/2015 – Present *Assistant Professor*
Department of Electrical Engineering and Computer Science
Wichita State University
Wichita, KS

RESEARCH EXPERIENCE

9/2010 – 7/2015 *Research Assistant*
The Network, Energy, Security, and big daTa Group (NEST)
Mississippi State University

6/2009-9/2009 *Research Intern*
Massachusetts Institute of Technology
Cambridge, MA

6/2008-9/2008 *Research Intern*
University of California, Santa Barbara
Santa Barbara, CA

TEACHING EXPERIENCE

Fall 2015-Present

Instructor
Department of Electrical Engineering and Computer Science
Wichita State University

- CS 746 Data Communication Networks
- CS 898AM Cyberphysical System Security
- CS 898AN Cloud Computing Security

Fall 2013

Guest Lecturer
Department of Electrical and Computer Engineering
Mississippi State University

- ECE4813/ECE6813 Communication Theory, Fall 2013

Fall 2010 - Fall 2012

Laboratory Instructor
Department of Electrical and Computer Engineering
Mississippi State University

- EE3313: Electromagnetics I and II

PUBLICATIONS

- **Refereed Journal Papers**

11. **Sergio Salinas**, Changqing Luo, Xuhui Chen, Weixian Liao, and Pan Li, “Efficient Secure Outsourcing of Large-scale Sparse Linear Systems of Equations”, to appear in *IEEE Transactions on Big Data*.
10. Weixian Liao, Ming Li, **Sergio Salinas**, Pan Li, and Miao Pan, “Energy-Source-Aware Cost Optimization for Green Cellular Networks with Strong Stability”, to appear in *IEEE Transactions on Emerging Topics in Computing*.
9. **Sergio Salinas**, Xuhui Chen, Jinlong Ji, and Pan Li, “A Tutorial on Secure Outsourcing of Large-scale Computations for Big Data”, *IEEE Access*, vol. 4, pp. 883-894, 2016.
8. **Sergio Salinas**, and Pan Li, “Privacy-Preserving Energy Theft Detection in Microgrids: A State Estimation Approach,” *IEEE Transactions on Power Systems*, vol. 3, no. 2, pp. 883-894, 2016.
7. Ming Li, **Sergio Salinas**, Pan Li, Jinyuan Sun, and Xiaoxia Huang, “MAC-Layer Selfish Misbehavior in IEEE 802.11 Ad Hoc Networks: Detection and Defense,” *IEEE Transactions on Mobile Computing*, vol. 14, no. 16, pp 1203-1217, 2015.
6. Arun Thapa, Ming Li, **Sergio Salinas**, and Pan Li, “Asymmetric Social Proximity Based Private Matching Protocols for Online Social Networks,” *IEEE Transaction on Parallel and Distributed Systems*, vol. 26, no. 6, pp. 1547-1259, 2015.
5. Ming Li, **Sergio Salinas**, Pan Li, Xiaoxia Huang, Yuguang Fang, and Savo Glisic “Optimal Scheduling for Multi-radio Multi-channel Multi-hop Cognitive Cellular Networks,” *IEEE Transactions on Mobile Computing*, vol. 14, no. 1, pp. 139-154, 2015.
4. **Sergio Salinas**, Ming Li, Pan Li, and Yong Fu, “Dynamic Energy Management for the Smart Grid with Distributed Energy Resources in Smart Grids”, *IEEE Transactions on Smart Grid*, vol. 4, no. 4, pp. 2139 - 2151, 2013.

3. **Sergio Salinas**, Ming Li, and Pan Li, "Privacy-Preserving Energy Theft Detection in Smart Grids: A P2P Computing Approach," *IEEE Journal on Selected Areas in Communications (JSAC)*, vol. 31, no. 9, pp. 257-267, 2013
 2. Ming Li, **Sergio Salinas**, and Pan Li, "Locaward: A Security and Privacy Aware Location-Based Rewarding System," *IEEE Transactions on Parallel and Distributed*, vol. 25, no. 2, pp. 343-352, 2013.
 1. **Sergio Salinas**, Ming Li, and Pan Li, "Multi-Objective Optimal Energy Consumption Scheduling in Smart Grids," *IEEE Transactions on Smart Grid*, vol. 4, no. 1, pp. 341-348, 2013.
- **Refereed Conference Papers**
 8. Weixian Liao, Wei Du, **Sergio Salinas**, and Pan Li, "Efficient Secure Outsourcing of Large-scale Optimization for Smart Cities," *IEEE International Conference on Smart City*, Sydney, Australia, December 12-14, 2016.
 7. Abu Asaduzzaman, Shanta Mazumder, and **Sergio Salinas**, "An auspicious secure processing technique for near field communication systems," *IEEE Ubiquitous Computing, Electronics & Mobile Communication Conference (UEMCON)*, New York, NY, October 20-22, 2016
 6. **Sergio Salinas**, Changqing Luo, Weixian Liao, and Pan Li, "Efficient Secure Outsourcing of Large-scale Quadratic Programs," *ACM Asia Conference on Computer and Communications Security (AsiaCCS)*, Xi'an, China, May 30-June 3, 2016 (Acceptance ratio: 73/350= 21%).
 5. **Sergio Salinas**, Changqing Luo, Xuhui Chen, and Pan Li, "Efficient Secure Outsourcing of Large-scale Linear Systems of Equations," *IEEE International Conference on Computer Communications (INFOCOM'15)*, Hong Kong, China, April 26-May 1, 2015 (Acceptance ratio: 316/1640 = 19%).
 4. **Sergio Salinas**, Weixian Liao, Changqing Luo, and Pan Li, "State Estimation for Energy Theft Detection in Microgrids," *International ICST Conference on Communications and Networking in China (CHINACOM)*, Maoming, China, August 14-16, 2014 (Best Paper Award).
 3. Weixian Liao, **Sergio Salinas**, Pan Li, and Miao Pan, "Optimal Energy Cost for Strongly Stable Multi-hop Green Cellular Networks," *IEEE International Conference on Distributed Computing Systems (ICDCS)*, Madrid, Spain, June 30-July 3, 2014 (Acceptance ratio: 66/500 = 13%).
 2. Ming Li, **Sergio Salinas**, Arun Thapa, and Pan Li, "n-CD: A Geometric Approach to Preserving Location Privacy in Location-Based Services," *IEEE International Conference on Computer Communications (INFOCOM'13)*, Turin, Italy, April 14-19, 2013 (Acceptance ratio: 280/1613 = 17%).
 1. **Sergio Salinas**, Ming Li, and Pan Li, "Privacy-Preserving Energy Theft Detection in Smart Grids," *IEEE Communications Society Conference on Sensor, Mesh and Ad Hoc Communications and Networks (SECON)*, Seoul, Korea, June 18-21, 2012 (Acceptance ratio: 30%).

PROFESSIONAL ACTIVITIES

- **Journal Referee:** IEEE Transactions on Smart Grid, IEEE Journal on Selected Areas in Communications, IEEE Transactions on Vehicular Technology, IEEE Transactions on Big Data, IEEE Transactions on Information Forensics and Security, IEEE Transactions on Dependable Computing.

- **Conference Referee (Technical Committee Member):** International Conference on Computer Communications (INFOCOM) 2017, International Conference on Information Technology (ICIT), IEEE Consumer Communications and Networking Conference (CCNC), International Conference on Computing, Networking, and Technologies (ICNC).
- **Society Memberships**
 1. ACM, IEEE, IEEE-Communications Society, IEEE-Power and Energy Society, Society of Professional Hispanic Engineers

HONORS AND AWARDS

- Student Travel Grant, IEEE INFOCOM, Hong Kong, China, 2015.
- Graduate Publication Award, College of Engineering, Mississippi State University, 2014
- IEEE-Eta Kappa Nu Honor Society, Mississippi State University, 2014-Present
- Swalm Fellowship, Mississippi State University, 2010-Present
- Student Travel Grant, IEEE SECON, Seoul, Korea, 2012
- Academic Scholarship, School of Engineering, Jackson State University, 2006-2010
- Athletic Scholarship, Tennis Team, Jackson State University, 2006-2010