Hui Chen

Curriculum Vitae
As of September 23, 2020

Assistant Professor
Department of Computer and Information Science
Brooklyn College of the City University of New York
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Google Scholar: `http://goo.gl/hIrBsu`

Education

Ph.D. in Computer Science — August 2006
University of Memphis, Memphis, TN 38152, U.S.A.

M.S. in Mathematical Sciences (with Concentration in Computer Science) — December 2003
University of Memphis, Memphis, TN 38152, U.S.A.

M.S. in Geophysics — August 1996
University of Science and Technology of China, Hefei, Anhui, China

B.E. in Applied Geophysics — August 1993
China University of Mining and Technology, Xuzhou, Jiangsu, China

Positions and Appointments

Assistant Professor, Doctoral Faculty of the Ph.D. Program in Computer Science, The Graduate Center of the City University of New York, September 2018 – Present

Assistant Professor, Department of Computer and Information Science, Brooklyn College of the City University of New York, August 2017 – Present

Associate Professor of Computer Science, Department of Engineering and Computer Science/Department of Mathematics and Computer Science, Virginia State University, August 2012 – July 2017

(Interim) Associate Chair, Department of Mathematics and Computer Science, Virginia State University, Fall 2012 - Spring 2014

Assistant Professor of Computer Science, Department of Mathematics and Computer Science, Virginia State University, August 2007 – August 2012

Programmer/Programmer Analyst, AutoZone Inc, IT Department, August 2005 – July 2007

Graduate Research and Teaching Assistant, Department of Computer Science, University of Memphis, 2001 – 2005

Staff Assistant Research Scientist, Institute of Geophysics, Chinese Academy of Science, Beijing, China, 1999–2001

Graduate Research Assistant, Institute of Geophysics, Chinese Academy of Science, Beijing, China, 1996–1999

Graduate Research and Teaching Assistant, Department of Earth and Space Sciences, University of Science and Technology of China, Hefei, China, 1993–1996

Journal Publications

[1] Y. Xiao, L. Zeng, H. Chen, and T. Li, "Prototyping flow-net logging for accountability management in linux operating systems," *IEEE Access*, vol. 7, pp. 131172–131187, August 2019.

[2] H. Chen, K. Damevski, D. Shepherd, and N. A. Kraft, "Modeling hierarchical usage context for software exceptions based on interaction data," *Automated Software Engineering*, vol. 26, pp. 733–756, December 2019.

[3] H. Chen, J. Coogle, and K. Damevski, "Modeling Stack Overflow tags and topics as a hierarchy of concepts," *Journal of Systems and Software*, vol. 156, pp. 283 – 299, October 2019.

[4] K. Damevski, H. Chen, D. C. Shepherd, N. A. Kraft, and L. Pollock, "Predicting future developer behavior in the ide using topic models," *IEEE Transactions on Software Engineering*, vol. 44, pp. 1100–1111, Nov 2018.

[5] B. Fu, Y. Xiao, and H. Chen, "FNF: Flow-net based fingerprinting and its applications," *Computers & Security*, vol. 75, pp. 167 – 181, June 2018.

[6] L. Zeng, H. Chen, and Y. Xiao, "Accountable administration in operating systems," *International Journal of Information and Computer Security*, vol. 9, pp. 157–179, 2017.

[7] L. Zeng, Y. Xiao, H. Chen, B. Sun, and W. Han, "Computer operating system logging and security issues: a survey," *Security and Communication Networks*, vol. 9, no. 17, pp. 4804–4821, 2016.

[8] J.-S. Lee, K. Damevski, and H. Chen, "Exploring computer science students' learning of sensor-driven mobile app design: A case study," *International Journal of Teaching and Case Studies*, vol. 3/4, pp. 187–206, 2016.

[9] L. Zeng, Y. Xiao, and H. Chen, "Auditing overhead, auditing adaptation, and benchmark evaluation in Linux," *Security and Communication Networks*, vol. 8, no. 18, pp. 3523–3534, 2015.

[10] J. Wang, K. Damevski, and H. Chen, "Sensor data modeling and validating for wireless soil sensor network," *Computers and Electronics in Agriculture*, vol. 112, pp. 75 – 82, March 2015. Special Issue in Precision Agriculture.

[11] Z. Xiao, Y. Xiao, and H. Chen, "An accountable framework for sensing-oriented mobile cloud computing," *Journal of Internet technology*, vol. 15, pp. 813 – 822, September 2014.

[12] H. Chen, Y. Xiao, and S. V. Vrbsky, "An update-based step-wise optimal cache replacement for wireless data access," *Computer Networks*, vol. 57, no. 1, pp. 197 – 212, 2013.

[13] Y. Xiao, H. Chen, M. Guizani, and H.-H. Chen, "Optimal pipeline paging load balancing for hierarchical cellular networks," *IEEE Transactions on Mobile Computing*, vol. 11, no. 9, pp. 1532–1544, 2012.

[14] Y. Xiao, Y. Zhang, J. H. Gibson, G. G. Xie, and H. Chen, "Performance analysis of ALOHA and p-persistent ALOHA for multi-hop underwater acoustic sensor networks," *Cluster Computing*, vol. 14, pp. 65–80, March 2011.

[15] J. Liu, Y. Xiao, H. Chen, S. Ozdemir, S. Dodle, and V. Singh, "A survey of payment card industry data security standard," *IEEE Communications Surveys and Tutorials*, vol. 12, pp. 287–303, Third Quarter 2010.

[16] Y. Xiao, H. Chen, K. Wu, B. Sun, Y. Zhang, X. Sun, and C. Liu, "Coverage and detection of a randomized scheduling algorithm in wireless sensor networks," *IEEE Transactions on Computers*, vol. 59, pp. 507–521, April 2010.

[17] Y. Xiao, H. Chen, X. Du, Y. Zhang, H.-H. Chen, and M. Guizani, "On hierarchical pipeline paging in multi-tier overlaid hierarchical cellular networks," *IEEE Transactions on Wireless Communications*, vol. 8, pp. 4406–4410, September 2009.

[18] H. Chen, Y. Xiao, X. Hong, F. Hu, and J. L. Xie, "A survey of anonymity in wireless communication systems," *Security and Communication Networks*, vol. 2, no. 5, pp. 427–444, 2009.

[19] Y. Xiao, Y. Zhang, M. Peng, H. Chen, X. Du, B. Sun, and K. Wu, "Two and three-dimensional intrusion object detection under randomized scheduling algorithms in sensor networks," *Computer Networks*, vol. 53, no. 14, pp. 2458 – 2475, 2009.

[20] H. Chen, Y. Xiao, and S. V. Vrbsky, "Scalability study of cache access mechanisms in multiple-cell wireless networks," *Computer Networks*, vol. 52, no. 15, pp. 3017 – 3027, 2008.

[21] H. Chen and Y. Xiao, "On-bound selection cache replacement policy for wireless data access," *IEEE Transactions on Computers*, vol. 56, pp. 1597–1611, December 2007.

[22] Y. Xiao, H. Chen, X. Du, and M. Guizani, "Performance analysis of blanket paging, sequential probability paging, and pipeline probability paging for wireless systems," *IEEE Transactions on Vehicular Technology*, vol. 56, pp. 2745–2755, September 2007.

[23] Y. Xiao, H. Chen, and M. Guizani, "Non-blocking pipeline paging with known location probabilities for wireless systems," *IEEE Transactions on Wireless Communications*, vol. 6, pp. 3632–3640, October 2007.

[24] Y. Xiao, H. Chen, H.-H. Chen, B. Sun, and C. Chen, "Optimal utilization and effects of inaccurate estimation in mobile database failure restoration," *IEEE Transactions on Wireless Communications*, vol. 6, pp. 2086–2095, June 2007.

[25] H. Chen, Y. Xiao, and X. Shen, "Update-based cache access and replacement in wireless data access," *IEEE Transactions on Mobile Computing*, vol. 5, pp. 1734–1748, December 2006.

[26] Y. Xiao and H. Chen, "Optimal callback with two-level adaptation for wireless data access," *IEEE Transactions on Mobile Computing*, vol. 5, pp. 1087–1102, August 2006.

[27] H. Chen and Y. Xiao, "Cache access and replacement for future wireless internet," *IEEE Communications Magazine*, vol. 44, pp. 113–123, May 2006.

[28] Y. Xiao and H. Chen, "Optimal periodic location area update for mobile telecommunications networks," *IEEE Transactions on Wireless Communications*, vol. 5, pp. 930–937, April 2006.

[29] H. Chen, J.-M. Chiu, J. Pujol, K. Kim, K.-C. Chen, B.-S. Huang, Y.-H. Yeh, and S.-C. Chiu, "A simple algorithm for local earthquake location using 3d Vp and Vs models: Test examples in the central united states and in central eastern taiwan," *Bulletin of the Seismological Society of America*, vol. 96, no. 1, pp. 288–305, 2006.

[30] Y. Xiao, H. Chen, and M. Guizani, "Performance evaluation of pipeline paging under paging delay constraint for wireless systems," *IEEE Transactions on Mobile Computing*, vol. 5, pp. 64–76, January 2006.

[31] Y. Xu, F. Liu, J. Liu, and H. Chen, "Crust and upper mantle structure beneath western china from p wave travel time tomography," *Journal of Geophysical Research: Solid Earth*, vol. 107, no. B10, pp. ESE 4–1–ESE 4–15, 2002.

[32] P. Xu, F. Liu, K. Ye, Q. Wang, B. Cong, and H. Chen, "Flake tectonics in the sulu orogen in eastern china as revealed by seismic tomography," *Geophysical Research Letters*, vol. 29, no. 10, pp. 23–1–23–4, 2002.

[33] P. Xu, F. Liu, Q. Wang, B. Cong, and H. Chen, "Slab-like high velocity anomaly in the uppermost mantle beneath the dabie-sulu orogen," *Geophysical Research Letters*, vol. 28, no. 9, pp. 1847–1850, 2001.

[34] R. Sun, F. Liu, J. He, and H. Chen, "Structural setting of strong earthquakes in the huabei area of china," *pure and applied geophysics*, vol. 158, no. 5-6, pp. 903–918, 2001.

Refereed Conference Publications

[1] H. Chen, A. Ciborowska, and K. Damevski, "Using automated prompts for student reflection on computer security concepts," in *Proceedings of the 2019 ACM Conference on Innovation and Technology in Computer Science Education*, ITiCSE '19, (New York, NY, USA), pp. 506–512, ACM, 2019.

[2] B. Fu, Y. Xiao, and H. Chen, "FNF: Flow-net based fingerprinting," in *Proceedings of the ACM Turing 50th Celebration Conference - China*, ACM TUR-C '17, (New York, NY, USA), pp. 31:1–31:5, ACM, 2017.

[3] K. Damevski, H. Chen, D. Shepherd, and L. Pollock, "Interactive exploration of developer interaction traces using a hidden markov model," in *Proceedings of the 13th International Workshop on Mining Software Repositories*, MSR '16, (New York, NY, USA), pp. 126–136, ACM, 2016.

[4] L. Zeng, Y. Xiao, and H. Chen, "Linux auditing: Overhead and adaptation," in *Proceedings of the 2015 IEEE International Conference on Communications (ICC '15) - Communication and Information Systems Security Symposium*, ICC '15, pp. 7168–7173, June 2015.

[5] L. Zeng, Y. Xiao, and H. Chen, "Accountable logging in operating systems," in *Proceedings of the 2015 IEEE International Conference on Communications (ICC '15) - Communication and Information Systems Security Symposium*, ICC '15, pp. 7163–7167, June 2015.

[6] H. Chen and K. Damevski, "A teaching model for development of sensor-driven mobile applications," in *Proceedings of the 2014 Conference on Innovation and Technology in Computer Science Education*, ITiCSE '14, (New York, NY, USA), pp. 147–152, ACM, 2014.

[7] H. Chen, K. Damevski, and W. M. Edwards, "Infusing cyber-physical systems concepts into an introductory computer science course," in *the 18th Annual Conference of the Northeast region of the Consortium for Computing Sciences in Colleges (J. Comput. Sci. Coll.)*, vol. 28, (USA), pp. 26–34, Consortium for Computing Sciences in Colleges, June 2013.

[8] K. Damevski, B. Altayeb, H. Chen, and D. Walter, "Teaching cyber-physical systems to computer scientists via modeling and verification," in *Proceeding of the 44th ACM technical symposium on Computer science education*, SIGCSE '13, (New York, NY, USA), pp. 567–572, ACM, 2013.

[9] J. Wang, H. Chen, K. Damevski, and J. Liu, "Mobility-tolerant, efficient multicast in mobile cloud applications," in *Mobile Wireless Middleware, Operating Systems, and Applications* (N. Venkatasubramanian, V. Getov, and S. Steglich, eds.), vol. 93 of *Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering*, pp. 167–180, Springer Berlin Heidelberg, 2012.

[10] M. Peng, Y. Xiao, H. Chen, Q. Hao, A. V. Vasilakos, and J. Wu, "Sensor distribution on coverage in sensor networks," in *Quality, Reliability, Security and Robustness in Heterogeneous Networks* (X. Zhang and D. Qiao, eds.), vol. 74 of *Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering*, pp. 328–344, Springer Berlin Heidelberg, 2012.

[11] J. Wang, K. Damevski, and H. Chen, "Model refinement and data filtering in high-tunnel greenhouse sensor network," in *Proceedings of the 7th ACM symposium on QoS and security for wireless and mobile networks*, Q2SWinet '11, (New York, NY, USA), pp. 43–50, ACM, 2011.

[12] L. Zeng, H. Chen, and Y. Xiao, "Accountable administration and implementation in operating systems," in *Global Telecommunications Conference (GLOBECOM 2011), 2011 IEEE*, pp. 1–5, 2011.

[13] K. Damevski, H. Chen, and T. L. Dahlgren, "Reducing component contract overhead by offloading enforcement," in *Proceedings of the 2009 Workshop on Component-Based High Performance Computing*, CBHPC '09, (New York, NY, USA), pp. 1–4, ACM, 2009.

[14] K. Damevski and H. Chen, "Automated provenance collection for cca component assemblies," in *Computational Science . ICCS 2009* (G. Allen, J. Nabrzyski, E. Seidel, G. Albada, J. Dongarra, and P. Sloot, eds.), vol. 5544 of *Lecture Notes in Computer Science*, pp. 259–268, Springer Berlin Heidelberg, 2009.

[15] Y. Xiao, H. Chen, Y. Zhang, X. Du, B. Sun, and K. Wu, "Intrusion objects with shapes under randomized scheduling algorithm in sensor networks," in *Distributed Computing Systems Workshops, 2008. ICDCS '08. 28th International Conference on*, pp. 315–320, 2008.

[16] H. Chen, Y. Xiao, and S. Vrbsky, "Invalidation report scalability of cache access mechanisms in future multiple-cell wireless internet," in *Global Telecommunications Conference, 2007. GLOBECOM '07. IEEE*, pp. 1943–1947, 2007.

[17] Y. Xiao, H. Chen, X. Du, and M. Guizani, "Paging schemes performance for wireless systems," in *Global Telecommunications Conference, 2007. GLOBECOM '07. IEEE*, pp. 5260–5264, 2007.

[18] X. Zhang, Y. Xiao, H. Chen, and T. Hu, "A decision-tree approach to analyzing channel allocation algorithms for two-tier wireless local loops," in *Proceedings of the 2nd Annual Conference of the Midwest United States Association for Information Systems (MWAIS.2007)*, May 2007.

[19] J. Gibson, G. Xie, Y. Xiao, and H. Chen, "Analyzing the performance of multi-hop underwater acoustic sensor networks," in *OCEANS 2007 - Europe*, pp. 1–6, 2007.

[20] Y. Xiao, Y. Zhang, X. Sun, and H. Chen, "Asymptotic coverage and detection in randomized scheduling algorithm in wireless sensor networks," in *Communications, 2007. ICC '07. IEEE International Conference on*, pp. 3541–3545, 2007.

[21] Y. Xiao, H. Chen, K. Wu, B. Sun, and C. Liu, "Modeling detection metrics in randomized scheduling algorithm in wireless sensor networks," in *Wireless Communications and Networking Conference, 2007.WCNC 2007. IEEE*, pp. 3741–3745, 2007.

[22] Y. Xiao and H. Chen, "An analytical model of the ODPLAU scheme for telecommunication networks," in *Wireless Communications and Networking Conference, 2007.WCNC 2007. IEEE*, pp. 3194–3198, 2007.

[23] Y. Xiao, H. Chen, and M. Guizani, "On evaluating and optimizing pipeline probability paging under QoS constraints in wireless systems," in *Global Telecommunications Conference, 2006. GLOBECOM '06. IEEE*, pp. 1–5, 2006.

[24] Y. Xiao, M. Guizani, and H. Chen, "Hierarchical pipeline paging in hierarchical wireless networks," in *Global Telecommunications Conference, 2006. GLOBECOM '06. IEEE*, pp. 1–5, 2006.

[25] Y. Xiao, H. Chen, K. Wu, C. Liu, and B. Sun, "Maximizing network lifetime under QoS constraints in wireless sensor networks," in *Global Telecommunications Conference, 2006. GLOBECOM '06. IEEE*, pp. 1–5, 2006.

[26] H. Chen, Y. Xiao, and X. Shen, "Step-wise optimal cache replacement for wireless data access in next generation wireless internet," in *Global Telecommunications Conference, 2006. GLOBECOM '06. IEEE*, pp. 1–5, 2006.

[27] H. Chen and Y. Xiao, "Asymptotical keep-best cache replacement policy for wireless data access," in *Communications, 2006. ICC '06. IEEE International Conference on*, vol. 1, pp. 397–402, 2006.

[28] Y. Xiao, H. Chen, and M. Guizani, "Pipeline probability paging for wireless systems," in *Communications, 2006. ICC '06. IEEE International Conference on*, vol. 4, pp. 1731–1735, 2006.

[29] Y. Xiao and H. Chen, "Periodic location area update schemes for UMTS 3G mobile networks: Optimality and comparison," in *Communications, 2006. ICC '06. IEEE International Conference on*, vol. 3, pp. 955–960, 2006.

[30] Y. Xiao, H. Chen, and M. Guizani, "Analytically modeling pipeline paging for wireless systems," in *Global Telecommunications Conference, 2005. GLOBECOM '05. IEEE*, vol. 6, pp. 3387–3391, 2005.

[31] Y. Xiao and H. Chen, "An adaptive callback cache access for wireless internet," in *Global Telecommunications Conference, 2005. GLOBECOM '05. IEEE*, vol. 2, 2005.

[32] H. Chen, Y. Xiao, and X. Shen, "Performance analysis of server-based poll-each-read in wireless internet," in *Global Telecommunications Conference, 2005. GLOBECOM '05. IEEE*, vol. 2, 2005.

[33] H. Chen, Y. Xiao, and X. Shen, "Update-based cache replacement policies in wireless data access," in *2nd International Conference on Broadband Networks, 2005.*, pp. 797–804 Vol. 2, Oct 2005.

[34] Y. Xiao, H. Chen, and M. Guizani, "Pipeline paging for wireless systems," in *Wireless Communications and Networking Conference, 2005 IEEE*, vol. 3, pp. 1347–1352, 2005.

[35] H. Chen and Y. Xiao, "Optimal dynamic periodic location update for UMTS mobile networks - a simulation approach," in *Global Telecommunications Conference Workshops, 2004. GlobeCom Workshops 2004. IEEE*, pp. 225–229, 2004.

[36] M. Garzon, A. Neel, and H. Chen, "Efficiency and reliability of DNA-based memories," in *Genetic and Evolutionary Computation . GECCO 2003* (E. Cantú, J. Foster, K. Deb, L. Davis, R. Roy, U.-M. O.Reilly, H.-G. Beyer, R. Standish, G. Kendall, S. Wilson, M. Harman, J. Wegener, D. Dasgupta, M. Potter, A. Schultz, K. Dowsland, N. Jonoska, and J. Miller, eds.), vol. 2723 of *Lecture Notes in Computer Science*, pp. 379–389, Springer Berlin Heidelberg, 2003.

Thesis

[1] H. Chen, *Cache Access and Replacement for Wireless Data Access*. PhD thesis, The University of Memphis, 2006. Under supervision of Y. Xiao. ISBN: 978-0-542-85359-3. `https://dl.acm.org/citation.cfm?id=1236983`.

Edited Books

[1] Y. Xiao, F. H. Li, and H. Chen, eds., *Handbook of Security and Networks*. River Edge, NJ, USA: World Scientific Publishing Co., Inc., 1st ed., 2011. ISBN-10: 981-4273-03-1, ISBN-13: 978-981-4273-03-9.

[2] Y. Xiao, H. Chen, and F. H. Li, eds., *Handbook on Sensor Networks*. Stevens Point, Wisconsin, USA: World Scientific and Engineering Academy and Society (WSEAS), 1st ed., 2010. ISBN-10: 981-283-730-2, ISBN-13: 978-981-283-730-1.

[3] Y. Xiao and H. Chen, eds., *Mobile Telemedicine: A Computing and Networking Perspective*. Boston, MA, USA: Auerbach Publications, 1st ed., June 2008. ISBN-10: 142-006-046-5, ISBN-13: 978-142-006-046-1.

Grant and Contract

Feature Extraction and Model Evaluation for Concept Hierarchies in Program Code and Documentation, Hui Chen (PI), PSC-CUNY Award #63264-00 51, 2020 - 2021, $3,499

Hierarchical Temporal Model for Coding Recommendation in Integrated Development Environments, Hui Chen (PI), PSC-CUNY Award #62240-00 50, 2019 - 2020, $3,500

Building Highly Interpretable IDE Interaction Model from Multi-Datasets, Hui Chen (PI), PSC-CUNY Award #61067-00 49, 2018 - 2019, $3,500

Project G-010: Automated Defect Detection in Radiography, Dawit Haile (PI), Hui Chen (Co-PI), Wei-Bang Chen (Co-PI), Kostadin Damevski (Co-PI), Pallant Ramsundar (Co-PI), the Commonwealth Center of Advanced Manufacturing of Virginia (CCAM), April 2014 - March 2015, $91,700

CS4HS: Teaching Computer Science using the Android Platform, Google Inc., David Walter (PI), Kostadin Damevski (Co-PI), and Hui Chen (Co-PI), 2013, $10,000

Longevity-Oriented Curriculum Enhancement for Cyber-Physical Systems, The U.S. National Science Foundation (NSF), Hui Chen (PI), Kostadin Damevski (Co-PI), David Walter (Co-PI), and Ju Wang (Co-PI), October 1, 2011 – September 30, 2014, $199,231

Research Experience for Undergraduate (REU) Supplement to "MRI: Acquisition of Sensing and Computing Equipment for Smart High-Tunnel Greenhouses," The U.S. National Science Foundation (NSF), Hui Chen (PI), Kostadin Damevski (Co-PI), Ju Wang (Co-PI), Ahmad Rafie (Co-PI), and Christopher Mullins (Co-PI), March 1, 2011 – August 31, 2015, $16,000

MRI: Acquisition of Sensing and Computing Equipment for Smart High-Tunnel Greenhouses, The U.S. National Science Foundation (NSF), Hui Chen (PI), Kostadin Damevski (Co-PI), Ju Wang (Co-PI), Ahmad Rafie (Co-PI), and Christopher Mullins (Co-PI), September 15, 2010 – August 31, 2015, $230,662

Targeted Infusion Grant: Developing a New Information Technology Curriculum at Virginia State University, The U.S. National Science Foundation (NSF), Dawhit Haile (PI), Hui Chen (Co-PI), Shuhua Lai (Co-PI), September 15, 2010 – August 31, 2013, $200,000

Virginia State University Research Initiation Grant: Creating a Development Sensor Network Testbed, Virginia State University, Hui Chen (PI) and Dawit Haile (Co-PI), July 2008 – July 2010, $11,500

Virginia State University Research Initiation Grant: Utilizing Distance Education Facility and Specialized Labs to Enhancing Rate of Success in Mathematics and Computer Science Courses, Virginia State University, Dawit Haile (PI) and Hui Chen (Co-PI), July 2008 – July 2010, $10,000

Courses Taught

Assistant Professor, Department of Computer and Information Science, Brooklyn College of the City University of New York, August 2017 - Present

- CISC 3115 Introduction to Modern Programming Techniques (Fall 2018)
- CISC 3120 Design and Implementation of Software Applications I (Fall 2017, Spring 2018)
- CISC 3320 Operating Systems (Fall 2019, Spring 2019)
- CISC 7310X Operating Systems I (Spring 2018, Spring 2019)
- CISC 7332X Local Area Networks (Fall 2019, Fall 2018)

Assistant Professor, Doctoral Faculty of the Ph.D. Program in Computer Science, The Graduate School and University Center of the City University of New York, September 2018 – Present

- C Sc 80010 Research Survey (Spring 2019)

Assistant/Associate Professor, Department of Engineering and Computer Science/Department of Mathematics and Computer Science, Virginia State University, August 2007 – May 2017

- CSCI 100 Introduction to Computers (Fall 2011, Spring 2011, Fall 2010, Fall 2008)
- CSCI 101 Introduction to Computer Science Profession (Fall 2016, Fall 2009)
- CSCI 298 Internship in Computer Science I (Spring 2014)
- CSCI 312 Introduction to Robotics (Spring 2011)
- CSCI 356 Database Systems (Spring 2012, Spring 2011)
- CSCI 361 Embedded Systems: Design and Applications (Spring 2013)
- CSCI 388 Architecture and Operating Systems (Spring 2009, Spring 2008, Fall 2007)
- CSCI 392 Algorithms and Advanced Data Structures (Spring 2013)
- CSCI 400 Senior Seminar (Spring 2017, Fall 2016, Spring 2016, Fall 2015, Fall 2014, Fall 2013)
- CSCI 445 Computer Communications Network (Fall 2016, Fall 2015, Fall 2014, Fall 2013, Fall 2012, Fall 2010, Fall 2009, Fall 2008)
- CSCI 450 Computer Forensics (Fall 2013)
- CSCI 451 Computer Security (Fall 2016, Fall 2015, Fall 2014, Fall 2011)
- CSCI 456 Advanced Database Applications (Fall 2011)
- CSCI 485 Programming Languages (Spring 2016)
- CSCI 489 Operating Systems (Fall 2011)
- CSCI 493 Senior Project (Spring 2014, Spring 2012, Spring 2011, Fall 2010, Fall 2009, Spring 2009, Spring 2008, Fall 2007)
- CSCI 495 Topics in Computer Science (Spring 2008)
- CSCI 496 Web Development and Cyber Security (Spring 2015, Spring 2014, Spring 2013)
- CSCI 545 Advanced Data Communications (Fall 2016, Fall 2015, Fall 2014, Fall 2013, Fall 2012, Fall 2011, Fall 2010, Fall 2009, Fall 2008)
- CSCI 556 Advanced Database Applications (Fall 2011)

- CSCI 570 Computer Simulations (Sprign 2017, Spring 2016, Spring 2015, Spring 2013, Summer 2010)
- CSCI 600 Thesis I (Summer 2016, Fall 2015, Summer 2015, Fall 2014, Summer 2014, Fall 2013, Fall 2012, Spring 2012, Spring 2010, Fall 2009)
- CSCI 601 Thesis II (Summer 2016, Fall 2015, Summer 2015, Spring 2015, Fall 2014, Fall 2013, Fall 2012, Summer 2012, Spring 2012, Fall 2010, Summer 2010, Spring 2010)
- CSCI 610 Graduate Seminar I (Spring 2017, Fall 2016, Spring 2016, Fall 2015, Fall 2014, Fall 2013)
- CSCI 611 Graduate Seminar II (Spring 2017, Fall 2016, Spring 2016, Fall 2015, Fall 2014)
- CSCI 605 Master Project (Spring 2017, Fall 2016, Spring 2016, Fall 2015, Fall 2014, Spring 2013, Fall 2012, Spring 2012)
- CSCI 639 Independent Study in Computer Science (Spring 2013, Summer 2012)
- CSCI 647 Wireless Networks and Mobile Computing (Spring 2012, Spring 2010, Spring 2009)
- CSCI 670 Computer Security (Spring 2014, Spring 2013)
- MATH 452 Numerical Analysis (Fall 2009)
- MATH 540 Numerical Analysis (Fall 2009)
- STAT 210 Elementary Statistics (Spring 2010)
- STAT 340 Probability and Statistics for Computer Scientists (Spring 2009)

Graduate Teaching Assistant, Department of Computer Science/Department of Mathematical Sciences, University of Memphis, Fall 2001 – Spring 2005

- COMP 1200 Computer Literacy (as lab instructor)
- COMP 1900 (CS1) Introduction to Computer Science (in Java) (as instructor)
- COMP 1900 (CS1) Introduction to Computer Science (in Java) (as lab instructor)
- COMP 1900 (CS1) Introduction to Programming (in C++) (as lab coordinator and instructor)
- COMP 2150 (CS2) Data Structures (in C++) (as lab assistant and grader)
- COMP 2701 Discrete Structures Laboratory (as instructor)
- COMP 4081/6081 Software Development (as grader)
- COMP 4262/6262 Programming UNIX (as grader)
- COMP 4601/6601 Models of Computation (as grader)
- COMP 7740/8740 Neural Networks (as grader and lab assistant)

Intramural Service

Member, Curriculum and Exam Committee, Ph.D. Program in Computer Science, the Graduate School and University Center of the City University of New York, Spring 2019 – Spring 2020

Member, Faculty Council Committee of Committee on Honors, Citations & Awards, Brooklyn College of the City University of New York, Fall 2020 – Spring 2021.

Member, Undergraduate Curriculum Committee, the Department of Computer & Information Science, Brooklyn College of the City University of New York, Fall 2018 – Spring 2020

Member, Faculty Council Committee of Graduate Admissions & Standards, Brooklyn College of the City University of New York, Fall 2018 – Spring 2023.

Graduate Program Coordinator, Computer Science Program, Department of Engineering and Computer Science, Virginia State University, Fall 2016 – Spring 2017

Program Coordinator, Computer Science Program, Virginia State University, Fall 2012 – Summer 2016

Member, Curriculum Committee, College of Engineering and Technology, Virginia State University, Fall 2014 – Spring 2017

Member, Library Affairs Committee, Virginia State University, Fall 2007 – Spring 2017

Member, Computer Science ABET Committee, Department of Mathematics and Computer Science/Department of Engineering and Computer Science, Virginia State University, Fall 2007 – Spring 2017

Member, Curriculum Committee, Department of Mathematics and Computer Science, Virginia State University, Fall 2010–August 2015

Member, Graduate Committee, Department of Mathematics and Computer Science, Virginia State University, Fall 2010–August 2015

Member, Scheduling Committee, Department of Mathematics and Computer Science, Virginia State University, Fall 2012–August 2015

Member, Recruitment, Orientation and Retention Committee, Department of Mathematics and Computer Science, Virginia State University, Fall 2007–August 2015

Member, Faculty Search Committee, Department of Mathematics and Computer Science, Virginia State University, Spring 2008 and Spring 2009

Member, Computer Science Curriculum Revision Task Group, Department of Mathematics and Computer Science, Virginia State University, Fall 2007–Spring 2009

Extramural Service

Research Grant Proposal Reviewer

- Evaluator for the Experimental - Demonstration project (PED 2019), The Executive Agency for Higher Education, Research, Development and Innovation Funding, Romania, 2019
- Evaluator for the Experimental - Demonstration project (PED 2016), The Executive Agency for Higher Education, Research, Development and Innovation Funding, Romania, 2016
- Ad hoc reviewer for the 2014 CREST/HBCU-RISE program, U.S. NSF, 2014
- Ad hoc reviewer for the 2013 CREST/HBCU-RISE program, U.S. NSF, 2013
- Evaluator for the Partnership Programme - Joint Applied Research Projects (PCCA 2013), The Executive Agency for Higher Education, Research, Development and Innovation Funding, Romania, 2013

Technical Advisory Group Member

– Commonwealth Center for Advanced Manufacturing, 2015

Journal Editorial Board Member

– International Journal on Sensor Networks, 2010 – Present
– KSII Transactions on Internet and Information Systems, 2008 – 2012

Journal Guest Editor

– Special issue on "Selected Topics on Sensor Networks" of the International Journal of Sensor Networks, (with M. Li), vol.14, no.3, 2013
– Special issue on "Selected Topics on Sensor Networks" of the International Journal of Sensor Networks, (with M. Li), vol.12, no.2, 2012
– Special issue on "Recent Security Enhancements in Computers, Networking and Communications Systems" International Journal of Security and Networks, (with B. Sun), vol.6, no.2/3, 2011
– Special Issue on "2nd International Workshop on Sensor Networks" of International Journal of Sensor Networks (IJSNET), vol. 8, no. 3/4, 2010
– Special Issue on "1st International Workshop on Sensor Networks" of International Journal of Sensor Networks (IJSNET), vol. 6, no. 3/4, 2009
– Special Issue on "Wireless Network Security" of EURASIP Journal on Wireless Communications and Networking, (with Y. Xiao, S. Yang, Y.-B. Lin, and D.-Z. Du), 2008
– Special Issue on "Electronic-Health" of International Journal of Telemedicine and Applications (IJTA) (with Y. Xiao, A. Nicogossian, S. Olsson, A. Rafiq, M. E. Stachura, M. Watanabe, and P. Whitten), 2008
– Special Issue on "Wireless Telemedicine and Applications" of EURASIP Journal on Wireless Communications and Networking, (with Y. Xiao, Y.-B. Lin, and D.-Z. Du), 2007

Journal Reviewer

– Ad Hoc and Sensor Wireless Networks (2010, 2009)
– (Elsevier) Computer Communications (2010, 2009)
– (Elsevier) Computers and Electrical Engineering (2009)
– (Elsevier) Computers and Electronics in Agriculture (2017)
– (Elsevier) Computer Networks (2010)
– (Elsevier) Mathematical & Computer Modelling (2010)
– (Elsevier) Information Science (2012, 2011, 2010, 2008)
– (Elsevier) Software Testing, Verification and Reliability (2020)
– IEEE Access (2019)
– IEEE Communications Magazine (2019, 2018, 2017, 2015, 2012, 2011, 2010, 2009, 2008, 2007)
– IEEE Network (2010)
– IEEE Systems Journal (2012)
– IEEE Transactions on Mobile Computing (2014, 2013, 2011)

- IEEE/ACM Transactions on Networking (2019, 2018, 2011)
- IEEE Transactions on Parallel and Distributed Systems (2013, 2012, 2009)
- IEEE Transactions on Vehicular Technology (2009)
- IEEE Transactions on Wireless Communications (2016, 2015, 2014, 2013)
- IEEE Wireless Communications Magazine (2006)
- IET Communications (2013, 2011, 2010)
- (Inderscience) International Journal of Security and Networks (IJSN) (2008)
- (Inderscience) International Journal on Sensor Networks (2014, 2013, 2011)
- (Inderscience) International Journal of Wireless and Mobile Computing (2005)
- KSII Transactions on Internet and Information Systems (2012, 2010, 2009, 2008)
- (Hindawi) EURASIP Journal on Wireless Communications and Networking (2009, 2008)
- (Hindawi) International Journal of Vehicular Technology (IJVT) (2009)
- MPDI Sensors (2010)
- (Sage) International Journal of Distributed Sensor Networks (2017)
- (Springer) Journal of the Network and Systems Management (2011)
- (Wiley) International Journal of Communication Systems (2008, 2006)
- (Wiley) Security and Communication Networks (2012, 2011, 2010, 2009, 2008)
- (Wiley) Wireless Communications and Mobile Computing (2013, 2010, 2009, 2008, 2007)

Technical Program Committee Chair for Workshops

- International Workshop of Sensor Networks (SN 2013, 2012, 2011, 2010, 2009, 2008; in conjunctions with ICCCN in 2013, 2012, 2009, 2008 and with ICDCS in 2011, 2010)
- International Workshop on Security in Computers, Networking and Communications (SCNC 2011; in conjunctions with INFOCOM 2011)
- International Workshop on Pervasive Computing Systems and Infrastructures (PCSI 2009; in conjunction with TridentCom 2009)

Technical Program Committee Member for Conferences

- The IEEE International Conference on Communications (ICC 2019, 2018, 2017, 2016, 2015, 2014, 2013, 2012, 2010, 2009)
- The IEEE Global Communications Conference (Globecome 2019, 2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011, 2010, 2009)
- IEEE Consumer Communications and Networking Conference (CCNC 2018, 2017, 2016)
- IEEE Wireless Communications and Networking Conference (WCNC 2020, 2018, 2017, 2016, 2015)
- IEEE International Conference on Computer Communications (INFOCOM 2013, 2012, 2011)
- IEEE International Conference on Wireless and Mobile Computing, Networking, and Communications (WiMob 2011, 2009)
- IEEE International Conference on High Performance Computing and Communication (HPC 2011, 2005)

- Computer and Network Security Symposium, the IEEE International Wireless Communication and Mobile Computing Conference (IWCMC 2015, 2008, 2007)
- International Conference on Computer Communications and Networks (ICCCN 2008)

Conference Reviewer

- ACM International Conference on Modeling, Analysis, and Simulation of Wireless and Mobile Systems(MSWiM 2008)
- IEEE Conference on Computer Communications (INFOCOM'09)
- IEEE Global Telecommunications Conference (Globecom'06, '04)
- IEEE International Conference on Communications(ICC'07, ICC'05)
- IEEE International Conference on Distributed Computing Systems(ICDCS'04)
- IEEE International Conference on Mobile Ad Hoc and Sensor Systems (MASS 2008)
- IEEE International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob 2008)
- IEEE Wireless Communications and Networking Conference (WCNC'07, '05, '04)
- International Conference on Robot Communication and Coordination (ROBOCOMM 2009)

Master's Theses Advised

Fall 2017 - Present, Brooklyn College of the City University of New York

M. Albelwi, M.S. 2017,
Thesis: "Understanding graph and sequence features for detecting spammers in social networks"

Fall 2007 - Spring 2017, Virginia State University

C. Mack, M.S. 2016 (with Bank of America, as of 2018),
Thesis: "Feature Extraction Via Motif Finding from Sound Data to Differentiate Traffic Scenes"

B. Robinson, M.S., 2016 (with ActioNet, as of 2016),
Thesis: "Priorities in IoT Adoption via AHP Analysis: A Case Study"

R. Benson, M.S., 2016 (with United Parcel Service (UPS), as of 2016),
Thesis: "Modeling Replication in Computer Clusters using Next-Event Simulations"

B. Davis, M.S., 2015 (as Ph.D. student at North Carolina A&T State University, as of 2018)
Thesis: "Environmental Context Detection using Sound Signatures on Mobile Devices"

C. Leo, M.S., 2015 (with Bank of America, as of 2016)
Thesis: "Performance Analysis of Random Access Wireless Sensor Networks for Cyber-Physical Systems"

Y. Huang, M.S., 2014 (with American Specialty Health, as of 2014)
Thesis: "Data Stream Management System in Wireless Sensor Network Deployed in VSU High-Tunnel Greenhouse"

E. Denloye-Ito, M.S., 2010 (as Ph.D. student at University of Virginia, as of 2015)
Thesis: "A Time-Series Clustering Model For Network Intrusion Detection"

A. H. Abraham, M.S., 2010 (with Automated Precision Inc., as of 2013)
Thesis: "The Implementation of a Parking Application in an Emulation Environment for Networked Vehicles"

B. Lowens, M.S., 2010 (as Ph.D. student at Clemson University, as of 2016)
Thesis: "Software Engineering Practices for the Implementation of a Smart Shopping Application"

Professional Memberships

IEEE, since 2005 (student member, 2005; member, 2007; senior member, 2016)
ACM, since 2006 (student member, 2006; member, 2007)
Sigma Xi, since 2018