

Nam P. Nguyen

CONTACT INFORMATION	7800 York Road Building, Towson, MD 21252 Email: npnguyen@towson.edu	Office Room 445 Tel: (410) 704-3089
EDUCATION	University of Florida Ph.D. in Computer Science University of Ohio M.S. in Applied Mathematics Vietnam National University B.S. in Applied Mathematics	Gainesville, FL 05/2013 Athens, OH 06/2009 HCMC, Vietnam 07/2007
ACADEMIC APPOINTMENTS	Assistant Professor Jess and Mildred Fisher Endowed Professor of Computer Science Computer & Information Sciences Department Towson University, Towson, MD, USA Research Assistant Computer & Information Science & Engineering Department University of Florida, Gainesville, FL, USA Research Intern CCS-3 Group, Cyber-Security Project Los Alamos National Laboratories, Los Alamos, NM, USA Research Assistant Mathematics Department University of Ohio, Athens, OH, USA.	08/2013 - Present 2016 - 2019 09/2009 - 05/2013 06/2011 - 09/2011 09/2007 - 06/2009
RESEARCH INTERESTS	Combinatorial optimization and Approximation Algorithms; Dynamic complex networks, Cyber-Security, Social networks analysis and Data mining, Information diffusion, Structural network vulnerability assessment.	
BOOK	M. T. Thai, Nam P. Nguyen and Huawei Shen (Eds). Computational Social Networks, Springer Publisher, 2015, ISBN: 978-3319217857.	
BOOK CHAPTERS	N. P. Nguyen, Y. Xuan and M. T. Thai. On Detection of Community Structure in Dynamic Social Networks. In Handbook of Optimization in Complex Networks: Communication and Social Networks. M. T. Thai and P. Pardalos (Eds), Springer Publisher, 2011. ISBN: 978-1461408567.	
JOURNAL ARTICLES	Hung T. Nguyen, Nam P. Nguyen, Tam Vu, Huan X. Hoang, Thang N. Dinh, Transitivity Demolition and The Falls of Social Networks, IEEE Access (ACCESS), Volume PP, Issue 99, Page 1 - 1, DOI: 10.1109/ACCESS.2017.2672666, 2017. Alan Kuhnle, Nam P. Nguyen, Thang N. Dinh, and My T. Thai. Vulnerability of clustering under node failure in complex networks. Social Network Analysis and Mining (SNAM), Volume 7, Issue 8, DOI:10.1007/s13278-017-0426-5, 2017. Md A. Alim, Nam P. Nguyen, My T. Thai and Abdelsalam Helal. Structural Vulnerability Assessment of Community-based Routing in Opportunistic Networks. IEEE/ACM Transactions on Mobile Computing (TMC), Volume 15, Issue 12, Page 3156 - 3170, DOI 10.1109/TMC.2016.2524571, Dec 2016.	

- N. P. Nguyen, Dung T. Nguyen and My T. Thai. A Method to Detect Communities with Stability in Social Networks. *Social Network Analysis and Mining Journal (SNAM)*, Vol. 4, Issue 1, DOI: 10.1007/s13278-014-0224-2, 2014.
- N. P. Nguyen, Thang N. Dinh, Yilin Shen and My T. Thai. Dynamic social community detection and its applications. *PLoS ONE* 9(4): E91431. DOI:10.1371/journal.pone.0091431, 2014.
- Thang N. Dinh, Nam P. Nguyen, Md Abdul Alim and My T. Thai. A Near-optimal Adaptive Algorithm for Maximizing Modularity in Dynamic Scale-free Networks. *Journal of Combinatorial Optimization (JOCO)* 2013.
- N. P. Nguyen, Guanhua Yan and My T. Thai. Analysis of Misinformation Spread Containment in Online Social Networks. *Elsevier Computer Networks, Special issue Towards a Science of Cyber Security (COMNET)* 2013.
- Y. Xuan, Y. Shen, N. P. Nguyen and M. T. Thai. Efficient Multi-Link Failure Localization in All-Optical Networks. *IEEE Transactions on Communications (TCOM)* 2013.
- Yilin Shen, N. P. Nguyen, Ying Xuan and My T. Thai. On the Discovery of Critical Nodes and Links for Assessing Network Vulnerability. *IEEE Transaction on Networking (TON)* 2013.
- Y. Xuan, Y. Shen, N. P. Nguyen and M. T. Thai. A Trigger Identification Service for Defending Reactive Jammers in WSN, *IEEE Transactions on Mobile Computing (TMC)* 2012.
- D. T. Nguyen, N. P. Nguyen, M. T. Thai and A. Helal. Optimal and Distributed Algorithms for Coverage Hole Healing in Hybrid Sensor Networks. *International Journal of Sensor Networks (IJSNet)* 2011.
- CONFERENCE PAPERS Joyram Chakraborty and Nam P. Nguyen, Designing Inclusive Security Policy Evidence from a Simulation, *The 9th Cambridge Workshop on Universal Access and Assistive Technology (CWUAAT)*, 2018.
- Tobin Porterfield, Nam P. Nguyen, Chaodong Han, Manish Kanjipuram, Mapping the field of humanitarian logistics and supply chain management: A bibliometric analysis, *Decision Sciences Institute (DSI)*, 2017.
- Hassan Alzahrani, Philippe Duverger and Nam P. Nguyen, Contextual Polarity and Influence Mining in Online Social Networks, *IEEE International Conference on Big Data Intelligence and Computing (DATACOM)*, 2017.
- Minh D. Dao, Akshay Rangamani, Sang (Peter) Chin, Nam P. Nguyen and Trac D. Tran, Targeted Dot Product Representation for Friend Recommendation in Online Social Networks, *IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM)*, 2015.
- Nam P. Nguyen, A Note On Clustering Difference by Maximizing Variation of Information, *International Conference on Computational Social Networks (CSoNet)*, 2015.
- M. P. McGuire and N. P. Nguyen. Community Structure Analysis in Big Climate Data. *SCDM Workshop, IEEE/ACM International Conference on Big Data (BigData)* 2014.
- Md. A. Alim*, N. P. Nguyen*, T. N. Dinh, and M. T. Thai. Vulnerability Analysis of Overlapping Communities in Complex Networks. *IEEE/WIC/ACM International Conference on Web Intelligence (WI)* 2014 (*: Co-first authors).
- N. P. Nguyen, Md Abdul Alim, Yilin Shen and My T. Thai. Assessing network vulnerability in a community structure point of view. *IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM)* 2013.
- Thang N. Dinh, N. P. Nguyen and My T. Thai. On Adaptive Approximation Algorithm for Community Detection in Dynamic Scale-free Networks. *IEEE International Conference on Computer Communications (INFOCOM)* 2013.

- Dung T. Nguyen, N. P. Nguyen and My T. Thai. Sources of Misinformation in Online Social Networks: Who to suspect? IEEE Military Communications Conference (MILCOM) 2012.
- N. P. Nguyen and My T. Thai. Finding Overlapped Communities in Online Social Networks with Nonnegative Matrix Factorization. IEEE Military Communications Conference (MILCOM) 2012
- N. P. Nguyen, Guanhua Yan, My T. Thai and Stephan Eidenbenz. Containment of Misinformation Spread in Online Social Networks. ACM SIG WEB International Conference on Web Science (WEBSCI) 2012.
- N. P. Nguyen, T. N. Dinh, D. T. Nguyen and M. T. Thai. Overlapping Community Structures and Their Detection on Social Networks. IEEE/ASE International Conference on Social Computing (SOCIALCOM) 2011.
- N. P. Nguyen, T. N. Dinh, S. Tokala and M. T. Thai, Overlapping Communities in Dynamic Networks: Their Detection and Mobile Applications. ACM SIG MOBILE International Conference on Mobile Computing (MOBICOM) 2011.
- N. P. Nguyen, T. N. Dinh, Y. Xuan and M. T. Thai. Adaptive Algorithms for Detecting Community Structure in Dynamic Social Networks. IEEE International Conference on Computer Communications (INFOCOM) 2011.
- Y. Shen, N. P. Nguyen, and M. T. Thai, Exploiting the Robustness on Power-Law Networks. International Conference on Computing and Combinatorics (COCOON) 2011.
- D. T. Nguyen, N. P. Nguyen, M. T. Thai and A. Helal. On Optimal Algorithm for Coverage Hole Healing in Hybrid Sensor Networks. IEEE International Conference on Wireless Communications and Mobile Computing (IWCMC) 2011.
- N. P. Nguyen, Y. Xuan and M. T. Thai. A Novel Method for Worm Containment on Dynamic Social Networks. IEEE Military Communications Conference MILCOM 2010.
- Y. Xuan, Y. Shen, N. P. Nguyen and M. T. Thai. A Graph-theoretic Qos-aware Vulnerability Assessment for Network Topologies. IEEE Global Communication Conference (GLOBECOM) 2010.
- N. P. Nguyen, B. P. The and Q. N. Hoang. Hiding Facial Information in Color Image. IEEE International Conference on Networking, Sensing and Control (ICNSC) 2008.

TEACHING
EXPERIENCE

Towson University

- COSC 236: Introduction to Computer Science I (F 13,14; Sp 14,15).
- COSC 237: Introduction to Computer Science II (F 15; Sp 16; Su 16,17,18).
- COSC/MATH 314: Cryptography (Sp 14).
- COSC 336: Data Structure and Algorithm Analysis (Su 15,16,17,18; F 16,17,18; Sp 17,18).
- COSC 458: Security Software Application (F 14,15,16,17,18; Sp 14).
- COSC 647: Security Software Application (F 13,14,15,16,17,18).
- COSC 710: Social Network Analysis (Sp 16,17,18).
- CyberDefense Student Club (Co-coaching):
 - 3rd place, Mid-Atlantic Collegiate Cyber Defense Competition, 2015.
 - 1st place, Mid-Atlantic Collegiate Cyber Defense Competition, 2014.
 - Bronze bracket leader, National Cyber League, 2013.

University of Florida

- COT3100-Applications of Discrete Structures (F 12).

University of Ohio

- Math113-College Algebra: 2008-2009.

GRANTS (Co-PI) CyberCorps(R) Scholarship for Service (SFS). Amount awarded \$3.9M (2017 -)

(Co-PI) Building a Technical and General Education Cybersecurity Modules Curriculum. Amount awarded \$190,662. NSA BAA 2017 CyberSecurity Core Curricula Development (2017 - 2018)

(Co-PI) Big Data SIG Grant, School of Emerging Technology, Towson University. Amount awarded \$2,000 (2017)

(PI) NVIDIA Corporation Hardware Grant. Awarded Titan X Graphic Card (2016)

(Co-PI) Assessment of Autonomy Engines Voice Classification Models - Maryland Industrial Partnerships (MIPS) Grant Phase II. Amount awarded: \$80,215. (2015 - 2017)

(PI) Structural Vulnerability Analysis of Complex Networks. Faculty Development Research Committee Grant. Towson University. Amount awarded \$5,700. (2014 - 2015)

(Co-PI) Big Data Mining and Modeling to Develop Effective Strategies for Online Consumer Co-Design Initiatives. School of Emerging Technology, Towson University. Amount awarded \$18,700. (2014 - July 2016)

STUDENTS Hassan Alzahrani (DSc), Social Network Data Mining. 2016 - now

Amirhossein Gharavi (DSc - Independent Study), Mobile Application. Spring 2017

Eric Owusu (DSc- Independent Study), Social Network Data Mining. Summer 2015

Branden Ehrenreich (MS - MIPS grant), A False Sense of Security: Analyzing Sensitive Data Leaks Within Android Interprocess Communication. Spring 2015

Dan Dunning (MS), Analyzing User Visible Vulnerabilities in Financial Websites. Spring 2014

Rober Dayton (MS), Cellular Keylogging through Acoustic Cryptanalysis. Spring 2014

Nam K. Ha (BS - MIPS grant). Spring 2014 - 2016

Nourish Khan (FDRC grant). Summer 2015

Cassandra VanNess (FDRC grant). Summer 2015

PROFESSIONAL ACTIVITIES Panelist

- National Science Foundation, 2015, 2017.

Conference/Workshop Organization

- Local Chair, ACM Conference on Hypertext and Social Media (HT), 2018
- Program Co-Chair, 1st International Conference on Big Data, Cloud Computing, Data Science & Engineering (BCD), 2016
- Workshop Chairs, Workshop on Mobile Social Networking and Computing (MSNCom), 2015
- TPC Co-Chairs, 4th Conference on Computational Social Networks (CSoNet), 2015
- Publicity Chair, 3rd Workshop on Computational Social Networks (CSoNet), 2014

Associate Editor

- Computational Social Networks Journal, (2013 -)
- Mathematical Foundations of Computing, (2016 -)

Conference TPC Member

- The 20th International Conference on Computing, Control and Networking (ICCCN), 2018.
- The 85th IEEE Vehicular Technology Conference (VTC2018-Spring)
- The 20th International Symposium on Wireless Personal Multimedia Communications (WPMC 2017)
- IEEE Global Communications Conference: Mobile and Wireless Networks (GLOBECOM'17)

- The 2nd International Conference on Big Data, Cloud Computing, Data Science & Engineering (BCD'17)
- 15th International Conference on Software Engineering Research, Management and Applications (SERA'17)
- IEEE Conference on Computer Communications (INFOCOM'16, 17)
- International Conference on Wireless Algorithms, Systems, and Applications (WASA'16, 17)
- International Joint Conference on Artificial Intelligence (IJCAI'16)
- International Conference on Computer Communication and Networks (ICCCN'16)
- International Conference on Big Data Computing and Communications (BIGCOM'16)
- International Computing and Combinatorics Conference (COCOON'16)
- International Conference on Computational Social Networks (CSoNet'16, 17)
- IEEE Conference on Mobile Ad-hoc and Sensor Networks (MSN'14, 15)

Journal and Conference reviewer

- IEEE Trans. on Distributed Computing (TPDS)
- IEEE Trans. on Intelligent Systems
- IEEE Trans. on Networking (TON)
- IEEE Trans. on Services Computing
- IEEE Trans. on Vehicular Technology (IVT)
- IEEE Trans. on Computational Social Systems
- IEEE Trans. on Cybernetics
- IEEE Trans. on Information Forensics & Security
- Elsevier Neurocomputing
- Elsevier Information Sciences
- Elsevier Information Processing & Management
- Theoretical Computer Sciences (TCS)
- Social Network Analysis and Mining (SNAM)
- Int. Journal of Sensor Networks (IJSNET)
- Journal of Combinatorial Optimization (JOCO)
- Optimization Letter
- Ad Hoc Networks Journal
- Wireless Communication and Mobile Computing
- Springer Trans. on Large-Scale Data- and Knowledge-Centered Systems (TLDKS)
- MSN'14-15, CSoNet'14-15, ISSAC'10, INFOCOM'10-13, COCOON'10-15, SIMPLEX'11, SOCIALCOM'11, MILCOM'11, ICDCS'13

AWARDS

The Jess and Mildred Fisher Endowed Professor of Computer Science, Towson University 2016 - 2019.

ACM SIGWEB student travel grant (WEBSCI conference) 2012 (one of 8 awarded recipients)

ACM SIGMOBILE student travel grant (MOBICOM conference) 2011

UF CISE departmental (2011) and UF College of Engineering (2012) student travel grants

UFIC Outstanding Achievement Certification 2010

MILCOM conference travel grant 2010, 2012

Teaching & Research Assistantship, Ph.D program, 2009-2012

Purdue Big Ten Grad Expo travel grant 2008.

Teaching & Research Assistantship, M.S program 2007-2009

Oddon Valle Scholarship (France) 2007.

UFJ Bank Scholarship (Japan) 2007.

AmCham Vietnam Scholarship (USA-Vietnam) 2006.