Curriculum Vitae

Guevara Noubir, PhD

Professor and Executive Director of Cybersecurity Programs
Northeastern University, Khoury College of Computer Sciences, Boston, MA, USA
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Education:

1991-1996: Ph.D. in Computer Science.
Thesis: "Algebraic Methods for Fault-Tolerance: Applications to Communication Protocols"
Advisor: Professor Henri J. Nussbaumer
Swiss Federal Institute of Technology in Lausanne (EPFL), Switzerland

1991: MS in CS (diplôme d'ingénieur). Specialization in networks and real-time systems.
Ecole Nationale Supérieure d'Informatique et de Mathématiques Appliquées de Grenoble (ENSIMAG) and Institut National Polytechnique de Grenoble (INPG), France.

Employment and work experience:

2011-Present:	Professor at Northeastern University – Khoury College of Computer Sciences
2019-Present:	Executive Director of Cybersecurity Programs at Northeastern University
2019-Present:	Co-Founder of Novowi
2017-Present:	Principal Investigator of Northeastern University DHS/NSA Center of Academic Excellence in Cybersecurity Research
2020-2023:	Affiliated Faculty, UM6P, Morocco
2017-2019:	Director of Cybersecurity and Information Assurance Graduate Programs
March 2017:	Distinguished Visiting Fellow, University of Edinburgh
Jul. 06-Jul. 09:	Visiting Scientist, Massachusetts Institute of Technology, LIDS.
2006-2011:	Associate Professor at Northeastern University – College of Computer and Inf. Science.
Dec. 07-Jul. 08:	Visiting Scientist, Eurecom, Sophia-Antipolis, France.
2001-2006:	Assistant Professor at Northeastern University – College of Computer and Inf. Science.
1997-2000:	Senior Research scientist (Expert) in the Real-time Software and Networking Group at the Centre Suisse d'Electronique et de Microtechnique (CSEM), Switzerland. Responsibilities: Coordinator for the workpackages of several European projects in Wireless Communications and Network Security.
Fall'1999:	Visiting Professor at University of Nebraska at Lincoln, USA.
1991-1996:	Research Assistant at the Swiss Federal Institute of Technology in Lausanne (EPFL).

External Grants:

1. "ROSETA-5G: Robust and Secure Tactical 5G Slice", Office of Naval Research (ONR), Principal Investigator, 3/2020-2/2024.
2. "Lightweight Scalable and Secure 5G and Beyond Networks", NSF Convergence Accelerator Joint NSF/DOD Track G: Securely Operating Through 5G Infrastructure, 8/2022-8/2023.
3. "RF Situational Awareness for Proactive and Dynamic Network Defense", DoD, Principal Investigator, 9/2020-8/2022.
4. "DoD CySP Capacity Building: ELastIC CYber Range (ELICCYR)", DoD, Principal Investigator with co-PI William Robertson, 9/2020-12/2021.
5. "Sensing Elasticity and Agility meet Machine Learning for Enabling Spectrum Sharing (SEAMLESS)", Defense Advanced Research Projects Agency (DARPA), PI, 1/2017-1/2020.
6. "Advancing Warfighter Technologies", ONR, co-PI with PI David Luzzi, 3/2018 – 3/2019.

7. "Analyzing, Detecting, and Mitigating Mobile Side Channel Attacks", Google Faculty Research Award, PI, 2017.
8. "Network Security Education: A Hands-On Approach", DoD/NSA, PI with Triet-V. Huu, 11/2017-10/2018.
9. "Renewal: Scholarship For Service @ Northeastern - a multi-disciplinary approach", NSF, PI with co-PIs Agnes Chan, David Kaeli, 8/2017 - 8/2023.
10. "USBRCCR: HealthSense: Assessing and Protecting Privacy in Wireless Wearable Sensor-generated Medical Data", NSF, PI, with co-PI Kaushik Chowdhury, 9/2017-8/2019.
11. "Expeditionary Cyber: Elastic Networks & Secure Localization and Synchronization", Office of Naval Research, co-PI (leading 2 out 6 projects) with PI David Luzzi, 11/2016-11/2018.
12. "EAGER: Collaborative: Towards Understanding the Attack Vector of Privacy Technologies", NSF, PI with Aziz Mohaisen (University of Buffalo), 9/2016-8/2018.
13. "Cloud Computing on Sensitive Data: Research and Education", DoD, PI with co-PI Agnes Chan, 9/2015-9/2017.
14. "TWC: Medium: Collaborative: Strengthening Wi-Fi Network Wide", National Science Foundation, Secure and Trustworthy Cyberspace, PI, 8/2014-7/2018.
15. "Multi-Disciplinary Preparation of Next Generation Information Assurance Practitioners - Renewal", NSF, PI with co-PIs Agnes Chan, David Kaeli, Wil Robertson, 9/2012-9/2018.
16. "Large-Scale Attacks in Multi-Level Interdependent Networks: Emerging Threats, Mitigation, and Recovery", Raytheon, PI.
17. "CSR: Privacy and Security for MapReduce Clouds with PASMAC", National Science Foundation, PI with Erik-Oliver Blass, 9/2012-8/2016.
18. "SWEAP - Smart Waveforms using Evasive mission-Adaptive Protocols", DARPA, PI with Agnes Chan, Rajmohan Rajaraman, and Ravi Sundaram, 5/2011 – 9/2013.
19. "Cloud Computing Security", Microsoft Research, Research Gift, 2010-2013.
20. "Workshop on Biologically Enabled Wireless Networks", National Science Foundation, PI with Bernardo Barbiellini, 9/2010-12/2012.
21. "MRI: Development of a Second-Generation Applications-Driven Wireless Sensor Networking", National Science Foundation, PI with Stefano Basagni, Peter Desnoyers, Marty Vona, 3/2010-9/2013.
22. "NeTS: A Game-Theoretic Framework for Agile and Resilient Wireless Systems", National Science Foundation, PI with Rajmohan Rajaraman, 9/2009-8/2012.
23. "EAGER: Electromagnetic Biological Transducers", National Science Foundation, Principal Investigator, 9/2009-9/2011.
24. "REU: Secure Wireless Ad Hoc Robots on Mission Autonomous-Cooperative Search and Beamforming for SWARMs", National Science Foundation, Research Experience for Undergraduates, 2009-10.
25. "CT-ISG: Secure Localization: An Education and Research Joint Approach", National Science Foundation, Principal Investigator, PI with Agnes Chan, 9/2007-8/2010.
26. "CRI: IAD Equipment for Cross-Layer Wireless Protocols Design and Prototyping", National Science Foundation, Principal Investigator, 9/2007-8/2009.
27. "SPREAD: Second-generation Protocol Resiliency Enabled through Adaptive Diversification", DARPA, PI with Ravi Sundaram, Agnes Chan, Rajmohan Rajaraman, 10/2005-12/2007.
28. "A Hands-On Course on Trustworthy Networking", Principal Investigator, Microsoft Trustworthy Computing Grant, 2006.
29. REU Supplement to NSF CAREER Award.
30. "Cross-Layer Protocols for Robust and Scalable Heterogeneous Wireless Networks", NSF CAREER Award, Principal Investigator, 2/2005-8/2010.
31. "Secure Location Related Services", DRAPER Laboratory, PI, 7/2003-6/2004.
32. "Secure Location Related Services", DRAPER Laboratory, PI, 7/2002-6/2003.
33. "Securing ATM Networks", Swisscom, PI, 1997.

Internal Grants:

- "Tier 1: Institutional Data and Energy Flows: Revealing drivers of urban energy consumption through remote sensing, real-time systems data analysis, dynamic modelling, and data visualization", with Kristian Kloeckl and Matthias Ruth, 2015-2016.
- "Tier 1: Secure & Robust Software Defined Radios", Northeastern University, 2013-2014.
- "Secure & Robust Hybrid Wireless Networks", Northeastern University, Research and Scholarship Development Fund, Principal Investigator, July 2004 – June 2005.

Awards and Honors:

- Northeastern University Excellence in Research and Creative Activity Award 2018.
- Lead of DARPA Spectrum Collaboration Challenge (SC2) $1.5M winning team award in 2017, 2018, finalist 2019.
- Advisor/coach of Northeastern University winning team at MITRE embedded CTF (eCTF) 2021 competition.
- Advisor/coach of Northeastern University winning team of CSAW Cybersecurity Games 2020 competition.
- Advisor/coach of Northeastern University winning team at MITRE embedded CTF (eCTF) 2020 competition.
- Advisor/coach of Northeastern University winning team at MITRE embedded CTF (eCTF) 2019 competition.
- Best paper award ACM Conference on Security and Privacy in Wireless and Mobile Networks (WiSec), 2018.
- Google Faculty Research Award, 2017.
- Lead of one of 4 universities funded to compete in DARPA Spectrum Collaboration Challenge (SC2).
- Advised team of students in the MITRE embedded CTF (eCTF) 2017 competition, winning the "Mass Attack" achievement award given to the "most prolific offense, demonstrated by capturing significantly more flags than any other team in eCTF".
- Distinguished Visitor to University of Edinburgh, "Robustness and Privacy in Mobile & Wireless Systems", March 2017.
- Keynote lecture at ACM WiNTECH, "Reproducibility in Wireless Experimentation: Need, Challenges, and Approaches", October 2016.
- Best Paper Award at IEEE Conference on Communications and Network Security, 2016.
- Winner of DARPA Spectrum Challenge Cooperative DSC'2013 out of 90 teams ($25K Prize). Ranked 4th in DARPA Spectrum Challenge Cooperative DSC'2014.
- Distinguished Lecture IEEE IAS, "LTE & LTE Security", 2013.
- National Science Foundation CAREER Award (2005 – 2010).
- Google Android Developers Challenge 2008, top 20 (out of over 1800 teams), won $125 award prize.
- Best paper award at the ACM Conference on Security and Privacy in Wireless and Mobile Networks (WiSec), 2011 (top paper out of 110), runner-up best paper award ACM WiSec'2013.
- IEEE Senior Member, 2001.
- Program Chair of two National Science Foundation Workshops on Biologically-Enabled Wireless Networks, and Synthetic Biology for Bio Computation and Communications 2011-2012.
- Judge in the iGEM Synthetic Biology Competition – Software Division, 2012 & 2013.
- Research and Education program selected for the 2009 & 2012 Highlights of the National Science Foundation Division of Computer and Network Systems.
- Distinguished Lecture at University of Michigan – Dearborn, "Robustness and Privacy in Wireless Systems", November 1, 2013.
- Elected member of the Dean Search Committee in the College of Computer and Information Science at Northeastern University 2012-2014.
- Selected by the Provost Office for Northeastern University Research Leadership Development Initiative (ReDI), 2013-2014.
- Chair of the Hiring Committee in the College of Computer and Information Science at Northeastern University 2010-2011.

Invited Talks, Colloquia, and Panels:

1. Keynote lecture at IEEE Conference on Communications and Network Security (CNS), 2022.
2. Keynote lecture at ACM Conference on Security and Privacy in Wireless and Mobile Networks, "Wireless and Mobile Softwarization: Security and Privacy Pandora's Box?", 2019.
3. Keynote at the Brazilian Symposium on Information and Computational Systems Security, "Security and Privacy in Mobile and Wireless Systems", 2019.
4. Keynote lecture at ACM WiNTECH, "Reproducibility in Wireless Experimentation: Need, Challenges, and Approaches", October 2016.
5. Invited talk at MIT, "Robustness and Privacy in Mobile & Wireless Systems", February 2016.
6. Invited talk at KTH (Sweden), "Robustness and Privacy in Mobile & Wireless Systems", February 2016.
7. Invited talk at The Kostas Research Institute for Homeland Security, "Emerging Trends in Cybersecurity", March 2016.
8. Invited talk at "New Frontiers in Networking Round Table", DoD meeting, MIT, May, 2015
9. Invited talk at Worcester Polytechnic Institute "Robustness and Privacy in Wireless and Mobile Systems", April 2015.
10. Panelist at NSF Workshop on Wireless Security, March 2015.
11. DARPA Spectrum Challenge Competition, March 2014 & September 2013.
12. Distinguished Lecture at University of Michigan – Dearborn, "Robustness and Privacy in Wireless Systems", November 1, 2013.
13. Distinguished Lecture IEEE IAS Costa Rica, "LTE & LTE Security", July 2013.
14. Invited talk at UC Davis, Colloquium, "Game Theory for Wireless Adversarial Settings", March 8, 2012.
15. Invited talk at UC Irvine, Colloquium, "Wireless Networks in Cooperative and Adversarial Settings", November 18, 2011.
16. Invited talk at UT Arlington, Colloquium, "Challenges and Directions in Wireless Security", November 18, 2010.
17. Invited talk to the Intelligence Community Cyber Security Tech Exchange on Moving Target, only 5 NSF funded researchers were invited to give talks, April 2010.
18. Invited talk at UMass Lowell Colloquium, "Heterogeneous Wireless Networks in Cooperative and Adversarial Settings", November 18, 2009.
19. Invited talk at ETHZ, "Heterogeneous Wireless Networks in Cooperative and Adversarial Settings", Zurich, Switzerland, May 20, 2008.
20. Invited talk at European ICT-FORWARD initiative on emerging security threats, "Wireless Infrastructure: Emerging Threats and Countermeasures", Goteborg, Sweden, April 17, 2008.
21. Invited talk at University of Washington, "Wireless Networks in Cooperative and Adversarial Settings", May 2007.
22. "Robust Wireless Networks", invited talk to IEEE Computer Communication Workshop (CCW), 2007.
23. "Future Wireless Internet Design", invited panel talk at Wireless Internet Conference WICON'06.
24. "Scalable Secure and Robust Heterogeneous Wireless Communication" invited talk to BANANAS workshop organised by BBN Technologies, 2005.
25. "Securing Wireless Sensor Networks", invited talk to IEEE Wireless Communications and Networking Conference (WCNC) panel on sensor networks security, March 2003.
26. "Security Challenges in Multihop Wireless Ad Hoc Networks", invited talk to IEEE Symposium on Wireless Personal Multimedia Communications (WPMC) panel on security of wireless networks.
27. "Resource Management in Wireless Multihop Ad Hoc Networks", Sun Microsystems, MA, April 2001.
28. ACM SIGMETRICS invited to the panel on "The Quest for a Universal Handheld Device", Boston, July 2001.

Current Doctoral Students:

Ph.D. students, with expected year of graduation

- Marinos Vomvas (MS, NTUA), 2024
- Xenia Dragon (BS, Northeastern University), 2027
- Stavros Dimou (MS, University Of Thessaly), 2029

Graduated Doctoral Students:

Ph.D. students, with year of graduation, dissertation title, and first position upon graduation:

- Norbert Ludant, "Securing Wireless Communications From the PHY Up: A Low-Layer Protocol Approach for Privacy, Security, and Resilience", 2024
- Harshad Sathaye, "Towards Secure Autonomous Aerial Vehicle Navigation", 2023, ETH Zurich.
- Hai Nguyen, "Robust and Secure Wireless Communications: A Deep Learning Approach", 2023, Meta.
- Tien Vo-Huu, "Software Defined Radio: A Double-Edged Sword for Security and Privacy in Wireless Systems", 2022, Mathworks.
- Sashank Narain, "Sensor Side-Channel Attacks on User Privacy: Analysis and Mitigation", 2018, Assistant Professor UMass Lowell.
- Kenneth Block, "Covert Channels in Modern Computer Systems: The cases of Mobile and Cloud", 2018, Raytheon.
- Amirali Sanatinia, "Abusing Privacy Infrastructures: Case Study of Tor", 2018.
- Aldo Cassola, "Providing Privacy from the Residential Cloud", 2015, joined the faculty of Universidad San Francisco de Quito, Ecuador.
- Triet Vo-Huu, "Robust Wireless Communication for Multi-Antenna, Multi-Rate, Multi-Carrier Systems", 2015, CyberFend Security; acquired by Akamai in 2017.
- Koorosh Firouzbakht, "Packetized Wireless Communication Under Jamming: A Game Theoretic Approach", 2015, joined ARCON Corp.
- Tao Jin, "Open Networking Infrastructure: Boosting Wireless Networks in the Era of Cloud", 2013, joined Qualcomm Research.
- Hooman Javaheri, "Wireless Transfer of Energy Alongside Information: From Wireless Sensor Networks to Bio-Enabled Wireless Networks", 2012, Snap Inc.
- Bishal Thapa, "Robust Wireless Communication in Adversarial Settings", 2011, BBN-Raytheon Technologies.
- Yin Wang, "Distributed Diversity in Hybrid Wireless Networks", 2010, Founder of Amino Apps.
- Xin Liu, "Cross Layer Design for Cooperative and Adversarial Wireless Networks", 2007, jointly advised with Ravi Sundaram, joined Microsoft Corp.
- Guolong Lin, "New paradigms and approximation algorithms for optimization under uncertainty", 2006, jointly advised with Rajmohan Rajaraman, joined Akamai Technologies.

Refereed Articles

Book Chapters:

1. K. Firouzbakht, G. Noubir, M. Salehi, "Multi-Carrier Jamming Mitigation: A Proactive Game Theoretic Approach", in "Proactive and Dynamic Network Defense", Springer, 2019.
2. H. Javaheri, G. Noubir, "Wireless Transfer of Energy Alongside Information in Wireless Sensor Networks", in "Mission-Oriented Sensor Networks and Systems: Art and Science", Springer, 2019.
3. G. Noubir, "Robust Wireless Infrastructure against Jamming Attacks", in Handbook on Securing Cyber-Physical Critical Infrastructure, Morgman Kaufmann, Elsevier, 2012.
4. P. Raja, G. Noubir, "A Synchronous Model for Fieldbus Systems", in Fieldbus Technology, Ed. N. P. Mahalik, Springer, 2003.

Journal and Magazine Publications:

1. Erik-Oliver Blass and Guevara Noubir, "Forward Security with Crash Recovery for Secure Logs", ACM Transactions on Privacy and Security, 27, 1, Article 3, 2024.
2. H. N. Nguyen, M. Vomvas, T. D. Vo-Huu and G. Noubir, "WRIST: Wideband, Real-Time, Spectro-Temporal RF Identification System Using Deep Learning," in IEEE Transactions on Mobile Computing, vol. 23, no. 2, 2024.
3. M. Delamou, G. Noubir, S. Dang and E. M. Amhoud, "An Efficient OFDM-Based Monostatic Radar Design for Multitarget Detection," in IEEE Access, vol. 11, 2023.

4. L. Xin, D. Starobinski, G. Noubir, "Cascading Attacks on Wi-Fi Networks: Theory and Experiments", in Transaction on Control of Network Systems, 2020.
5. A. Vergutz, G. Noubir, M. Nogueira, "Reliability for Smart Healthcare: A Network Slicing Perspective", IEEE Networks Magazine, 2020.
6. K. Coelho, D. Damião, G. Noubir, A. Borges, M. Nogueira and J. Nacif, "Cryptographic Algorithms in Wearable Communications: An Empirical Analysis", in IEEE Communications Letters, vol. 23, no. 11, 2019.
7. T.D. Vo-Huu, E.-O. Blass, G. Noubir, "EPiC: efficient privacy-preserving counting for MapReduce", Computing 101, 1265–1286 (2019).
8. S. Narain, G. Noubir, "Mitigating Location Privacy Attacks on Mobile Devices using Dynamic App Sandboxing", in Proceedings of Privacy Enhancing Technologies Symposium (PoPETS), 2019.
9. S. Narain, T. D. Vo-Huu, K. Block and G. Noubir, "The Perils of User Tracking Using Zero-Permission Mobile Apps," in IEEE Security & Privacy, vol. 15, no. 2, pp. 32-41, March-April 2017.
10. K. Firouzbakht, G. Noubir, M. Salehi, "Linearly Constrained Bimatrix Games in Wireless Communications", IEEE Transactions on Communications, vol. 64(1), pp. 429-440, 2016.
11. E.-O Blass, T. Mayberry, G. Noubir, "Practical Forward-Secure Range and Sort Queries with Update-Oblivious Linked Lists", in Proceedings of Privacy Enhancing Technologies Symposium (PoPETS), 2015(2), pp. 81-98, De Gruyter.
12. T. Moataz, E.-O. Blass, G. Noubir, "Recursive Trees for Practical ORAM", in Proceedings of Privacy Enhancing Technologies Symposium (PoPETS), 2015(2), pp. 115-134, De Gruyter.
13. K. Firouzbakht, G. Noubir, M. Salehi, "On the Capacity of Rate-Adaptive Packetized Wireless Communication Links under Jamming", IEEE Transactions on Wireless Communications, 2014.
14. B. Zayen, A. Hayar, G. Noubir, "Game Theory-based Resource Management Strategy for Cognitive Radio Networks", Journal of Multimedia Tools and Applications, 2014.
15. A. Cassola, T. Jin, G. Noubir, B. Thapa. "Efficient Spread Spectrum Communication without Pre-shared Secrets", IEEE Transactions on Mobile Computing, 2013.
16. E. Bayraktaroglu, C. King, X. Liu, G. Noubir, R. Rajaraman and B. Thapa. "Performance of IEEE 802.11 under Jamming", in Mobile Networks and Applications (MONET), Springer, 2013.
17. Y. Wang, G. Noubir. "Distributed Cooperation and Diversity for Hybrid Wireless Networks", IEEE Transaction on Mobile Computing, 2013.
18. H. Javaheri, B. Barbiellini, G. Noubir. "Energy Transfer Performance of Mechanical Nanoresonators Coupled with Electromagnetic Fields", Nanoscale Research Letters 2012.
19. B. Zayen, A. Hayar and G. Noubir, "Game Theory-Based Resource Management Strategy for Cognitive Radio Networks", Journal of Multimedia Tools and Applications, 2012.
20. Erik-Oliver Blass, Anil Kurmus, Refik Molva, Guevara Noubir, Abdullatif Shikfa, "The Ff-family of protocols for RFID-privacy and authentication", in IEEE Transactions on Dependable and Secure Computing, 2011.
21. G. Noubir, B. Thapa, Y. Wang, "Experimentation-Oriented Platform for Development and Evaluation of MANET Cross-Layer Protocols", in Ad Hoc Networks Journal, Elsevier, May, 2008.
22. G. Lin, G. Noubir, "On Link Layer Denial of Service in DATA Wireless LANs", in the Wiley Journal on Wireless Communications and Mobile Computing, Wiley, August, 2004.
23. S. Ci, H. Sharif, and G. Noubir. "Improving Goodput of the IEEE 802.11 MAC Protocol by Using Congestion Control Methods", in the International Journal on Wireless and Optical Communications (IJWOC), Vol. 1, No.2 (2004) 1-9, World Scientific Publishing.
24. G. Noubir, G. Lin (2003). "Low Power DoS Attacks in Data Wireless LANs and Countermeasures", in ACM SIGMOBILE Mobile Computing and Communications Review (MC2R), volume 7, Issue 3.
25. G. Noubir, G. Lin, M. Golitsine, N. Plante (2003). "Secure Sharing of Location Information over Ad Hoc Networks: An Application of Secure Multicast", in ACM SIGMOBILE Mobile Computing and Communications Review (MC2R), volume 7, Issue 3.
26. G. Noubir, K. Vijayanada and H. J. Nussbaumer (1998). "Signature-Based Method for Run-Time Fault Detection in Communication Protocols." Computer Communications Journal, Butterworth-Heinemann, Vol.21, No 5, May 1998.
27. G. Noubir and H. J. Nussbaumer (1995). "Self-correcting polynomial programs." In Journal of Reliable Computing, Vol 2, No 2, 1996.
28. P. Raja and G. Noubir (1993). "Static and dynamic polling mechanisms for fieldbus networks." In the

Operating Systems Review, 27(3), pages 34-45.

29. P. Raja, G. Noubir, L. Ruiz, J. Hernandez, and J.-D. Decotignie (1993). "Analysis of polling protocols for fieldbus networks." In the ACM-SIGCOMM Computer Communication Review, 23(3):69--90.

Conference publications:

1. N. Ludant, P. Robyns and G. Noubir, "From 5G Sniffing to Harvesting Leakages of Privacy-Preserving Messengers", in IEEE Symposium on Security and Privacy, 2023.
2. Hai N. Nguyen and Guevara Noubir, "JaX: Detecting and Cancelling High-power Jammers Using Convolutional Neural Network", ACM Conference on Security and Privacy in Wireless and Mobile Networks (WiSec'23), 2023.
3. H. Sathaye, G. Noubir, and A. Ranganathan, "On the Implications of Spoofing and Jamming Aviation Datalink Applications", in the Annual Computer Security Applications Conference (ACSAC), 2022.
4. H. N. Nguyen, G. Noubir, "Universal Beamforming: A Deep RFML Approach", in ACM International Conference on Modeling Analysis and Simulation of Wireless and Mobile Systems (MSWiM), 2022.
5. Tim Upthegrove, Guevara Noubir, Bishal Thapa, Dan Smith, Colin Funai, Scott Loos, Greg Kuperman, "Rapid Interoperability with OverlAI Gateways," MILCOM 2022 - 2022 IEEE Military Communications Conference (MILCOM), 2022.
6. N. Ludant, T. D. Vo-Huu, S. Narain, G. Noubir, "Linking Bluetooth LE & Classic and Implications for Privacy-Preserving Bluetooth-Based Protocols", in IEEE Symposium on Security and Privacy, 2021.
7. D. Giese, G. Noubir, "Amazon echo dot or the reverberating secrets of IoT devices", in Proceedings of the ACM Conference on Security and Privacy in Wireless and Mobile Networks (WiSec'21), 2021, **Runner-Up Best Paper Award**.
8. N. Ludant, G. Noubir, "SigUnder: a stealthy 5G low power attack and defenses", in Proceedings of the ACM Conference on Security and Privacy in Wireless and Mobile Networks (WiSec'21), 2021.
9. M. Vomvas, E.-O. Blass, G. Noubir, "SELEST: secure elevation estimation of drones using MPC", in Proceedings of the ACM Conference on Security and Privacy in Wireless and Mobile Networks (WiSec'21), 2021.
10. T. D. Vo-Huu, T. D. Vo-Huu, G. Noubir, "Spectrum-flexible secure broadcast ranging", in Proceedings of the ACM Conference on Security and Privacy in Wireless and Mobile Networks (WiSec'21), 2021.
11. H. Nguyen, M. Vomvas, T. D. Vo-Huu, G. Noubir, "Spectro-Temporal RF Identification using Deep Learning", in Proceedings of the ACM International Symposium on Mobility Management and Wireless Access (MobiWac'21), 2021.
12. Tien D. Vo-Huu, Norbert Ludant, Triet D. Vo-Huu, "Pilotless FS-FBMC for Flexible Spectrum Access and Sharing", IEEE International Symposium on Dynamic Spectrum Access Networks (DySPAN'21), 2021.
13. K. Zerhouni, E. M. Amhoud and G. Noubir, "Deep Neural Networks for Multicarrier Waveforms Classification in UAV Networks," 2021 17th International Symposium on Wireless Communication Systems (ISWCS), 2021.
14. M. J. Idrissi, I. Berrada and G. Noubir, "FEDBS: Learning on Non-IID Data in Federated Learning using Batch Normalization," in IEEE International Conference on Tools with Artificial Intelligence (ICTAI), 2021.
15. M. Cominelli, F. Gringoli, M. Lind, P. Patras, G. Noubir, "Even Black Cats Cannot Stay Hidden in the Dark: Full-band De-anonymization of Bluetooth Classic Devices", IEEE Symposium on Security and Privacy, 2020.
16. P. Robyns, M. M. Di Martino, P. Quax, W. Lamotte, G. Noubir, "Practical Operation Extraction from Electromagnetic Leakage for Side-Channel Analysis and Reverse Engineering", ACM Conference on Security and Privacy in Wireless and Mobile Networks (WiSec), 2020.
17. H. Sathaye, A. Ranganathan, G. Noubir, "Wireless Attacks on Aircraft Instrument Landing Systems", Usenix Security Symposium, 2019.
18. M. Stute, S. Narain, A. Mariotto, A. Heinrich, G. Noubir, M. Hollick, "A Billion Open Houses for Eve and Mallory: MitM, DoS, and Tracking Attacks on iOS and macOS Through Apple Wireless Direct Link", Usenix Security Symposium, 2019.
19. S. Narain, A. Ranganathan, G. Noubir, "Security of GPS/INS based On-road Location Tracking Systems", IEEE Symposium on Security and Privacy, 2019.
20. A. Aminian, G. Noubir, "Deep Cross-Modal Age Estimation", in Proceedings of Computer Vision Conference (CVC), Springer, 2019.

21. Kenneth Block and Guevara Noubir, "My Magnetometer Is Telling You Where I've Been?: A Mobile Device Permissionless Location Attack", in ACM Conference on Security & Privacy in Wireless and Mobile Networks (WiSec '18), **Best Paper Award**.
22. K. Block, S. Narain, G. Noubir, "An Autonomic and Permissionless Android Covert Channel", ACM Conference on Security and Privacy in Wireless and Mobile Networks (WiSec), 2017.
23. E.-O. Blass, T. Mayberry and G. Noubir, "Multi-Client Oblivious RAM Secure Against Malicious Servers", International Conference on Applied Cryptography and Network Security (ACNS), 2017.
24. E.-O. Blass, G. Noubir, "Secure Logging with Crash Tolerance", IEEE Conference on Communications and Networks Security (CNS), 2017.
25. A. Sanatinia et al., "Hyperdrive: A flexible cloud testbed for research and education", IEEE International Symposium on Technologies for Homeland Security (HST), 2017.
26. S. Narain, T. Vo-Huu, K. Block, and G. Noubir, "Inferring Location and Traffic Patterns without Permissions using Side-Channels", in Proceedings of IEEE Symposium on Security & Privacy, 2016.
27. T. Vo-Huu, T. Vo-Huu, G. Noubir, "Fingerprinting Wi-Fi Devices using Software Defined Radio", in Proceedings of the ACM Conference on Security and Privacy in Wireless and Mobile Networks, 2016.
28. T. Vo-Huu, T. Vo-Huu, G. Noubir, "Interleaving Jamming in Wi-Fi Networks", in Proceedings of the ACM Conference on Security and Privacy in Wireless and Mobile Networks, 2016.
29. A. Sanatinia, G. Noubir, "Honey Onions: a Framework for Characterizing and Identifying Misbehaving Tor HSDirs", in Proceedings of IEEE Conference on Communication Networks Security, 2016.
30. G. Noubir, M. Médard, P. Chin, "Wi (deband)-Fi: A Proposal for an Opportunistic Wideband Architecture based on Wi-Fi", Proceedings of the 14th ACM International Symposium on Mobility Management and Wireless Access, 2016.
31. A. Sanatinia, G. Noubir, "HOnions: Towards Detection and Identification of Misbehaving Tor HSDirs", Hot PETS (part of the PETS Symposium), 2016.
32. Liangxiao Xin, D. Starobinski, G. Noubir, "Cascading Denial of Service Attacks on Wi-Fi Networks", in Proceedings of IEEE Conference on Communication Networks Security, 2016, **Best Paper Award**.
33. G. Noubir, M. Medard, P. Chin, "Wi (deband)-Fi: A Proposal for an Opportunistic Wideband Architecture based on Wi-Fi", Proceedings of the 14th ACM International Symposium on Mobility Management and Wireless Access.
34. Guevara Noubir, Amirali Sanatinia, "Trusted code execution on untrusted platforms using Intel SGX", Virus Bulletin, 2016.
35. G. Noubir, A. Sanatinia, "Honey Onions: Exposing snooping tor HSDir relays", DEF CON 24, 2016.
36. A. Cassola, E.-O. Blass, and G. Noubir, "Authenticating Privately over Public Wi-Fi Hotspots", in Proceedings of the ACM Conference on Computer and Communications Security (CCS'15), acceptance rate 19% (128/660).
37. E.-O Blass, T. Mayberry, G. Noubir, "Practical Forward-Secure Range and Sort Queries with Update-Oblivious Linked Lists", in Proceedings of Privacy Enhancing Technologies Symposium (PETS'15), 2015.
38. T. Moataz, E.-O. Blass, G. Noubir, "Recursive Trees for Practical ORAM", in Proceedings of Privacy Enhancing Technologies Symposium (PETS'15), 2015.
39. A. Sanatinia, G. Noubir, "OnionBots: Subverting Privacy Infrastructure for Cyber Attacks", in Proceedings of the IEEE/IFIP International Conference on Dependable Systems and Networks, 2015 acceptance rate 21% (50/229).
40. T. Vo-Huu, G. Noubir, "Mitigating Rate Attacks through Crypto-Coded Modulation", in Proceedings of ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc), 2015, acceptance rate 14% (37/250).
41. E.-O. Blass, T. Mayberry, G. Noubir, K. Onarlioglu, "Toward Robust Hidden Volumes using Write-Only Oblivious RAM", in Proceedings of the ACM Conference on Computer and Communications Security (CCS), 2014, acceptance rate 19% (114/585).
42. S. Narain, A. Sanatinia, G. Noubir, "Single-stroke Language-Agnostic Keylogging using Stereo-Microphones and Domain Specific Machine Learning", in Proceedings of ACM Conference on Security and Privacy in Wireless and Mobile Network, Wisec'14, 2014, acceptance rate full papers 15% (14/96).
43. K. Firouzbakht, G. Noubir, M. Salehi, "Packetized wireless communication under jamming, a constrained bimatrix game", in IEEE GLOBECOM 2014.

44. T. Vo-Huu, E.-O. Blass, G. Noubir, "Counter-Jamming using Mixed Mechanical and Software Interference Cancellation", in Proceedings of ACM Conference on Security and Privacy in Wireless and Mobile Network, Wisec'13, 2013, acceptance rate full papers 14% (11/76), **Runner-up Best Paper Award**.
45. A. Cassola, W. Robertson, E. Kirda, G. Noubir. "A Practical, Targeted, and Stealthy Attack Against WPA Enterprise Authentication", in the Proceedings of the Network & Distributed System Security Symposium, NDSS, 2013, acceptance rate 17% (46/258).
46. Z. A. Qazi, J.K. Lee, T. Jin, G. Bellala, M. Arndt, G. Noubir, "Application-awareness in SDN", In Proceedings of ACM SIGCOMM, Demo, 2013.
47. K. Firouzbakht, G. Noubir, M. Salehi, "On the performance of multi-layer superposition coding scheme under constrained jamming", in Proceedings of the 47th IEEE Annual Conference on Information Sciences and Systems, CISS'2013.
48. K. Firouzbakht, G. Noubir, M. Salehi, "On the Capacity of Rate-Adaptive Packetized Wireless Communication Links under Jamming", in Proceedings of ACM Conference on Wireless Network Security, Wisec'12, acceptance rate 22% (17/76).
49. G. Noubir, R. Rajaraman, B. Sheng, B. Thapa, "On the Robustness of IEEE802.11 Rate Adaptation Algorithms against Smart Jamming", in Proceedings of ACM Conference on Wireless Network Security, Wisec'11, **Best Paper Award,** acceptance rate full papers 11% (10/91).
50. J. Tao, G. Noubir, B. Sheng, "WiZi-Cloud: Application-transparent Dual ZigBee-WiFi Radios for Low Power Internet Access", in Proceedings of IEEE Infocom 2011, acceptance rate 15% (291/1823).
51. K. Firouzbakht, G. Noubir, M. Salehi, "Superposition coding in an adversarial environment", Annual Conference on Information Sciences and Systems, CISS 2011.
52. B. Zayen, A. Hayar and G. Noubir, "Utility/Pricing-based Resource Allocation Strategy for Cognitive Radio Systems", ICMCS'11, 2nd International Conference on Multimedia Computing and Systems, 2011.
53. H. Javaheri, G. Noubir, Y. Wang, "Distributed Cooperation and Diversity for Hybrid Wireless Networks", in Proceedings of WWIC, 2010, LNCS, Springer-Verlag.
54. H. Javaheri, G. Noubir, "iPoint: A Platform-Independent Passive Information Kiosk for Cell Phones", in Proceedings of IEEE SECON, 2010, acceptance rate 20% (63/309).
55. T. Jin, G. Noubir, B. Thapa, "Zero Pre-shared Secret Key Establishment in Presence of Jammers", in Proceedings of ACM Symposium on Mobile Ad Hoc Networking and Computing, MobiHoc, 2009, acceptance rate 17% (31/175).
56. H. Javaheri, G. Noubir, S. Noubir (2009). "RF Control of Biological Systems: Applications to Wireless Sensor Networks", in Proceedings of the Fourth International Conference on Nano-Networks, NanoNet'09, LNCS, Springer-Verlag.
57. E. Bayrataroglu, C. King, X. Liu, G. Noubir, and B. Thapa (2008). "On the Performance of IEEE 802.11 under Jamming", in Proceedings of IEEE Infocom 2008, acceptance rate 20% (236/1160).
58. P. Tague, D. Slater, G. Noubir, R. Poovendran (2008). "Linear Programming Models for Jamming Attacks on Network Traffic Flows", 6th Intl. Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks (WiOpt'08), April 2008.
59. Agnes Chan, Xin Liu, Guevara Noubir, and Bishal Thapa (2007), "Control Channel Jamming: Resilience and Identification of Traitors", IEEE International Symposium on Information Theory ISIT'07.
60. H. Javaheri, G. Noubir, Y. Wang (2007). "Cross-Layer distributed diversity for heterogeneous wireless networks", in Proceedings of the Fifth International Conference on Wired/Wireless Internet Communication, WWIC'07, LNCS, Springer-Verlag, Portugal, May 2007.
61. Xin Liu, Guevara Noubir, Ravi Sundaram, San Tan (2007). "SPREAD: Foiling Smart Jammers using Multi-layer Agility", IEEE Infocom'07 Mini-Symposium.
62. G. Noubir (2006). "SWARM: Secure Wireless Ad hoc Robots on Mission - A Course Where Wireless Security Meets Robotics", in the Proceedings of The Colloquium for Information Systems Security Education, CISSE'06.
63. L. Jia, G. Noubir, R. Rajaraman, and R. Sundaram. "Group-independent Spanning Tree for Data Aggregation in Dense Sensor Networks," in Proceedings of IEEE DCOSS 2006.
64. Ch. Ravi Chandra, A. Kumarasubramaniam, R. Manokaran, G. Noubir and C. Pandu Rangan, and R. Sundaram. "Steganographic Communication in Ordered Channels", in Proceedings of Information Hiding IH 2006.

65. L. Jia, G. Lin, G. Noubir, R. Rajaraman and R. Sundaram (2005), "Universal Approximations for TSP, Steiner Tree and Set Cover", in Proceedings of ACM STOC'05.
66. J. Chen, L. Jia, X. Liu, G. Noubir, R. Sundaram (2005). "Minimum Energy Accumulative Routing in Wireless Networks", in Proceedings of IEEE Infocom.
67. T. Kaya, P. Lin, G. Noubir, and W. Qian (2005). "Efficient Multicast Trees with Local Knowledge on Wireless Ad hoc Networks" in the proceedings of the International Conference on Wired/Wireless Internet Communications, Lecture Notes in Computer Science, Springer-Verlag, 2005.
68. L. Jia, X. Liu, G. Noubir, R. Rajaraman (2005). "Transmission Power Control for Ad Hoc Wireless Networks: Throughput, Energy and Fairness", in Proceedings of IEEE Wireless Communications on Networking Conference, WCNC'05.
69. G. Lin, G. Noubir, R. Rajaraman (2004). "Mobility Models for Ad hoc Network Simulation", IEEE Infocom'04.
70. G. Noubir (2004). "On Connectivity in Ad Hoc Network under Jamming Using Directional Antennas and Mobility", in International Conference on Wired /Wireless Internet Communications, Lecture Notes in Computer Science, Springer-Verlag, WWIC'04.
71. F. Zhu, A. Chan, G. Noubir (2003). "Optimal Tree Structure for Key Management of Simultaneous Join/Leave in Secure Multicast", in Proceedings of MILCOM'03.
72. T. Kaya, G. Lin, G. Noubir, A. Yilmaz (2003). "Secure Multicast Groups on Ad Hoc Networks", in Proceedings of ACM Workshop on Security of Ad hoc and Sensor Networks, SASN'03.
73. G. Noubir, G. Lin, M. Golitsine, N. Plante (2003). "Secure Sharing of Location Information over Ad Hoc Networks: An Application of Secure Multicast", Poster, ACM Mobihoc, 2003.
74. G. Noubir, G. Lin (2003). "Low Power DoS Attacks in Data Wireless LANs and Countermeasures", Poster, ACM Mobihoc.
75. G. Lin, G. Noubir (2003). "Secure Multicast over Multihop Wireless Ad Hoc Networks", in the Proceedings of Mobile Ad Hoc Networks Workshop (MADNET), Sophia-Antipolis, France.
76. G. Lin, G. Noubir (2002). "Energy Efficient Broadcast with Sectored Antennas in Wireless Ad Hoc Networks", in Proceedings of IASTED/IEEE Wireless and Optical Communications Conference.
77. G. Noubir, F. Zhu, A. H. Chan (2002). "Key Management for Simultaneous Join/Leave in Secure Multicast", to appear in the Proceedings of IEEE International Symposium on Information Theory (ISIT).
78. J.-C. Birget, X. Zou, G. Noubir, B. Ramamurthy, "Hierarchy-Based Access Control in Distributed Environments" in the Proceedings of IEEE ICC, June 2001.
79. S. Ci, H. Sharif, and G. Noubir (2001). "Improving the Performance of the MAC Layer Using Congestion Control/Avoidance Methods in a Wireless Network" in the Proceedings of the 16th ACM Symposium on Applied Computing, Las Vegas, 2001.
80. G. Noubir, and L. von Allmen (1999), "Security Issues in Internet Protocols over Satellite Links", In Proceedings of the IEEE Vehicular Technology Conference (VTC'99), Amsterdam, Holland.
81. G. Noubir (1999). "A Scalable Key Distribution Scheme for Dynamic Multicast Groups." In Proceedings of the Third European Research Seminar on Advances in Distributed Systems, Madeira Island, Portugal
82. G. Noubir (1999). "FRAMES Demonstrator Packet Access Mode." In Proceedings of the ACTS FRAMES Workshop, Delft, Netherlands.
83. G. Noubir (1998). "Inter-layer Radio Resource Management in Hierarchical Cell Structures for the FRAMES Project." In Proceedings of the IEEE Globecom98, Sydney, Australia.
84. G. Noubir (1998). "Collision-Free One-Way Communication Using Reed-Solomon Codes." In Proceedings of the IEEE International Symposium on Information Theory and Applications (ISITA'98), Mexico city.
85. G. Noubir (1998). "Inter-layer Radio Resource Management in Hierarchical Cell Structures." In Proceedings of the 9th IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC'98), Boston, Massachusetts.
86. B. Y. Choueiry and G. Noubir (1998). "On the computation of Local Interchangeability in Discrete Constraint Satisfaction Problems." In the Proceedings of AAAI'98, pages 326-333. Madison, Wisconsin.
87. B. Y. Choueiry and G. Noubir (1997). "Using Complete No-Good Sets to Build a Disjunctive Decomposition Scheme for Discrete Constraints Satisfaction Problems." In the Proceedings of the 10th International FLAIRS Conference, pages 40-46. Daytona Beach, Fla.
88. Noubir, B. Y. Choueiry and H. J. Nussbaumer (1996). "Fault Tolerant Multiple Observers Using Error Control

Codes." In Proceedings of the IEEE International Conference on Network Protocols ICNP'96, Ohio, U.S.A.

89. G. Noubir and B. Y. Choueiry (1996). "Algebraic Techniques for the Optimization of Control Flow Checking." In the Proceedings of the 26th IEEE Symposium on Fault-Tolerant Computing (FTCS'96) pages 128-137, Sendai, Japan.
90. G. Noubir and M.-A. Péraldi (1996). "Vérification de la Sureté d'Exécution de Grafcets." In Real-Time Systems and Embeded Systems, RTS'96. Paris, France, January, 1996.
91. B. Y. Choueiry, G. Noubir, and B. Faltings (1996). "Blending AI and mathematics: the case of resource allocation." In the Proceedings of the Fourth International Symposium on Artificial Intelligence and Mathematics. Fort Lauderdale, Fla.
92. G. Noubir, K. Vijayananda, and H. J. Nussbaumer (1995). "A robust transport protocol for run-time fault detection." In Proceedings of ICNP'95: IEEE International Conference on Network Protocols, Tokyo, Japan.
93. G. Noubir and H. J. Nussbaumer (1995). "Voting with low communication overhead." In Proceedings of the Sixth International Conference on Signal Processing Applications & Technology (ICSPAT`95), Boston, MA.
94. G. Noubir and H. J. Nussbaumer (1995). "Self-correcting polynomial programs." In Proceedings of Symposium of Scientific Computing, Computer Arithmetic & Validated Numerics, Kluwer-verlag.
95. G. Noubir, K. Vijayananda, and P. Raja (1995). "Signature based technique for fault detection in communication protocols." In Proceedings of IEEE International Symposium on Information Theory.
96. G. Noubir, K. Vijayananda, and G. Berthet (1995). "Robust communication protocols for run-time fault detection." In Proceedings of the Twelfth IEEE International Conference on Computer Communication (ICCC`95), pages 493-498. Seoul, Korea.
97. G. Noubir and K. Vijayananda (1995). "Fault detection in communication protocols using signature analysis." In Proceedings of the International Conference on Intelligent Information Management Systems (IASTED/ISMM'95), pages 148-151. Washington, D.C.
98. G. Noubir and H. J. Nussbaumer (1995). "Arithmetization and self-reducibility methods for fault-detection in combinatorial circuits." In Proceedings of the Thirteenth IASTED International Conference Applied Informatics, pages: 21-23. Innsbruck, Austria.
99. G. Berthet, K. Vijayananda, and G. Noubir (1995). "A new presentation layer protocol for partitioned syntax transformation model." In Proceedings of the IEEE Twelfth International Conference on Computer Communication (ICCC'95), pages 499-504. Seoul, Korea.
100. T. Kouthon, G. Noubir, P. Raja, and J.-D. Decotignie (1995). "Modeling distributed PLC control." In Proceedings of the IFAC/IFIP Workshop on Algorithms and Architectures for Real-Time Control.
101. G. Noubir, Prasad Raja, and J.-D. Decotignie (1994). "Simulating the fieldbus synchronous model by timed Petri nets." In Proceedings of IEEE IECON'94, pages 1205-1210. Bologna, Italy.
102. D. R. Stephens, G. Noubir, and M. Moreaux (1994). "Tool path correction in 2 and 3 dimensions." In Proceedings of EURISCON'94, pages 1796-1809. Malaga, Spain.
103. B. Y. Choueiry, B. Faltings, and G. Noubir (1994). "Abstraction methods for resource allocation." In Proceedings 1994 Workshop on Theory Reformulation and Abstraction, pages 2-70/2-90.
104. G. Noubir, Daniel R. Stephens, and Prasad Raja (1993). "Specification of timed finite state machine in Z for distributed real-time systems.". In Proceedings of the IEEE Fourth Workshop on Future Trends in Distributed Computing Systems, pages 319-325. Lisbon, Portugal.
105. P. Raja, G. Noubir, L. Ruiz, J. Hernandez, and J.-D. Decotignie (1993). "Synchronous model for distributed real-time control systems." In Proceedings ICPADS'93, pages 26-30. Taipei, Taiwan.
106. P. Raja, J. Hernandez, L. Ruiz, G. Noubir, and J.-D. Decotignie (1993). "A software architecture for maintaining temporal consistency in a distributed real-time environment." In Proceedings of COMPSAC'93, pages 380-387. Phoenix, Arizona.
107. P. Raja and G. Noubir (1993). "Implementing synchronous network model on a FIP network." In IEEE Workshop on Advances in Parallel Distributed Systems (in conjunction with IEEE Symposium on reliable Distributed Systems), pages 20-27. Princeton, NJ.
108. P. Raja and G. Noubir (1993). "A functional approach for expressing temporal properties in inputs and outputs of real-time applications." In Proceedings of the Fourth Workshop on Future Trends in Distributed Computing Systems, pages 312-338. Lisbon, Portugal.
109. P. Raja, G. Noubir, L. Ruiz, J. Hernandez, M. Riese, and J.-D. Decotignie (1993). "Analysis of a class of polling protocols for fieldbus networks." In Proceedings of ICDDS'93, pages 139-155, Spain.

Patents

1. Erik-Oliver Blass, Guevara Noubir, "Plaintext equivalence proof techniques in communication systems", US20190109712A1, filed 2018.
2. Erik-Oliver Blass, Guevara Noubir, "Secure and Encrypted Logging Systems and Methods with Data Recovery", filed 2019.

Courses at Northeastern University:

	Quarter Courses	Quarter
COM3510	Computer Networks (new prep)	W'01
COM3525	Wireless Networks (new course)	S'01
COM3515	Internet-working (new prep)	F'01
COM3525	Wireless Networks	W'02
COM1337	UG-Computer Networks (new prep)	S'02
COM3510	Computer Networks	F'02
COM3522	Network Security (new course)	W'03
COM3525	Wireless Networks	S'03
	Semester Courses	**Semester**
CSG150	Fundamentals of Networking	F'03
CSG254	Network Security (new course)	S'04
CSG252	Cryptography (new prep)	F'04
CSG254	Network Security	S'05
CSG252	Cryptography	F'05
CSG254	Network Security	S'06
CSU610	Senior Honor Seminar (Secure Wireless Ad hoc Robots on Mission - SWARM)	S'06
CSG254	Network Security	S'07
CSU610	Senior Honor Seminar (SWARM)	S'07
CSG254	Network Security	S'09
CSG258	SWARM I	S'09
CS6740/4740	Network Security	F'09
CS6740/4740	Network Security	S'10
CS5700/4700	Fundamentals of Computer Networks	S'10
CS6740/4740	Network Security	F'10
CS7780	Special Topics in Networks	S'11
CS5700/4700	Fundamentals of Computer Networks	F'11
CS6710	Wireless Networks	S'12
CS5700/4700	Fundamentals of Computer Networks	S'12
CS6740/4740	Network Security	F'12
CS6740/4740	Network Security	S'13
CS6740/4740	Network Security	F'13
CS6740/4740	Network Security	S'14
CS7780	Special Topics: Wireless Security	F'14
CS6740/4740	Network Security	F'15
CS6710	Mobile and Wireless Systems	S'16
CS8674	Deconstructing the Cloud: a Security Perspective	S'16
CS6740/4740	Network Security	F'16
CS6740/4740	Network Security	S'17
CS6740/4740	Network Security	F'17
CS6740/4740	Network Security	F'18
IA 8660	INSuRE: Research Projects in National Information Security	F'18
CS6740/4740	Network Security	F'19
CY4930	Capstone in Cybersecurity	S'20
CY6740/4740	Network Security	F'22
CY6740/4740	Network Security	S'24

Courses prior to joining Northeastern University:

CSCE990: "Advanced Topics in Mobile and Wireless Networking", University of Nebraska at Lincoln, F'99.
CSCE463/863: "Introduction to Coding Theory", University of Nebraska at Lincoln, F'99.
Doctoral course: "Probabilistic and Interactive Algorithms", with Professor Henri J. Nussbaumer at EPFL, 1993.

Service to the Profession:

Associate Editor of ACM Transactions of Privacy and Security (2016 – 2020)
Associate Editor of IEEE Transaction on Mobile Computing (2012 – 2018).
Associate Editor of ACM Transactions of Information Forensics and Security (2016 – 2018)
Associate Editor of ACM Transactions of Information and System Security (2014 – 2016)
Area Editor of Elsevier Computer Networks Journal (2012 - 2017).

Steering Committee of ACM Security and Privacy in Wireless and Mobile Networks (WiSec) 2018 – 2024.

General Chair ACM Security and Privacy in Wireless and Mobile Networks (WiSec) 2017.

TPC co-chair of IEEE Conference on Distributed Computing in Sensor Systems (DCOSS) 2018.
TPC co-chair of ACM Conference on Security and Privacy in Wireless and Mobile Networks (WiSec) 2015.
TPC co-chair of IEEE Conference on Communications and Network Security (CNS) 2015.
TPC co-chair of IEEE International Symposium World of Wireless Mobile and Multimedia Networks (WoWMoM) 2015.
TPC co-chair of IEEE Conference on Sensing, Communication, and Networking (SECON) 2014.
TPC co-chair of the International Conference on Networked Systems (NETYS) 2014 (LNCS 8593).
TPC co-Chair International Conference on Computer Communication Networks 2012.
TPC co-Chair IEEE Workshop on Data Security and PrivAcy in wireless Networks D-SPAN 2011-2012.

Judge in the iGEM Synthetic Biology Competition – Software Division, 2012 & 2013.

Member of Technical Program Committee of Conferences:

- ACM Wireless Security Conference WiSec 2012-2024.
- IEEE Symposium on Security and Privacy 2021-2025.
- Usenix Security 2020-2021.
- Area Chair IEEE Conference on Communications and Network Security (CNS) 2016-2017.
- AsiaCCS 2015-2017.
- Program Committee Privacy Enhancing Technologies Symposium (PETS 2016-2017), Editorial Board of PoPETS 2016-2017.
- IEEE Infocom 2008-2012, 2016.
- International Conference on Mobile Computing and Networking MobiCom 2016, 2015, 2009, 2007.
- International Conference on Security and Cryptography (SECRYPT) 2012.
- International Symposium on Mobile Ad Hoc Networking and Computing MobiHoc'07.
- International Wired/Wireless Internet Communications WWIC'04-WWIC'11 (LNCS).
- International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks, WiOpt'06, WiOpt'07.
- International Symposium on Stabilization, Safety, and Security of Distributed Systems SSS'08-12.
- IEEE Symposium on Network Security and Information Assurance (part of ICC'06).
- International Conference on Information and Communications Security ICICS'04 (LNCS 3269).

I have served as a reviewer for the following funding agencies:

- I was invited to serve on over 40 National Science Foundation panels to review proposals on Wireless Networking and Network Security (2002-) [reviewed hundreds of proposals].
- I was also invited to review proposals for the French academic research program on computer security and dependability (ACISI), Israel Science Foundation, Hong Kong Research Grants Council, and Qatar National Research Fund.

External evaluator of the Computer Science Department of University of Massachusetts Boston (Academic Quality Assessment and Development – AQUAD), 2015.

Ph.D. committees:

- Konstantinos Athanasiou (Advisor Professor T. Wahl)
- Milan Stute (Advisor Professor M. Hollick, 2020)
- Matthias Schulz (Advisor Professor M. Hollick, 2018)
- Eric Miles (Advisor Professor E. Viola, 2014)
- Abhishek Samanta (Advisor Professor R. Sundaram, 2014)
- Peter Golbus (Advisor Professor J. Aslam, 2014)
- Dimitrios Kanoulakis (Advisor Professor M. Vona, 2014)
- Abdulla Al-Ali (ECE, Advisor Professor K. Chowdhury, 2014)
- Ruopeng Ye (Advisor Professor A. Chan 2008)
- Feng Zhu (Advisor Professor A. Chan 2007)
- Michele Battelli (ECE, Advisor: Professor S. Basagni 2007).
- Lujun Jia (Advisor: Professor R. Rajaraman, 2005).
- Rituparna Ghosh (ECE, Advisor: Professor S. Basagni, 2005).
- Yue Fang (ECE, Advisor Professor B. McDonald, 2005).
- Victor Grinberg (Advisor: Professor G. Cooperman, 2001).
- Ducan Shek Wong (Advisor: Professor A. Chan, 2001).

Industry Collaboration:

Airbus, BAE Systems, BBN Technologies, Draper Labs, Google, Microsoft, Raytheon.