# CURRICULUM VITAE

**David A. Mohaisen**

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## 1  Education & Training

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|---|---|---|---|
| University of Minnesota | Minneapolis, MN | Computer Science | Ph.D., 2012 |
| University of Minnesota | Minneapolis, MN | Computer Science | M.Sc., 2011 |
| Inha University | Incheon, KR | Computer Engineering | M.E., 2007 |

## 2  Research & Professional Experience

**2021–**  Associate Director of Cybersecurity and Privacy Cluster, UCF

**2021–**  Associate Professor of Modeling and Simulation, UCF (courtesy)

**2017–**  Associate Professor of Computer Science, University of Central Florida

**2017–**  Associate Professor of Computer Engineering, University of Central Florida (courtesy)

**2017**  Visiting Professor, US Air Force Research Laboratory (3 months)

**2017**  Visiting Researcher, Georgia Institute of Technology (4 months)

**2016**  Faculty Fellow, US Air Force Research Laboratory (3 months)

**2015-2017**  Assistant Professor of Computer Science, SUNY Buffalo

**2014-2015**  Senior Research Scientist, Verisign Labs

**2012-2014**  Research Scientist, Verisign Labs

**2012**  Visiting Researcher, Huawei Innovation Center (3 months)

**2011**  Visiting Researcher, International Computer Science Institute (3 months)

**2005-2009**  Research Engineer, ETRI

## 3  Publications and Other Scholarly Artifacts

### 3.1  Conference Publications with Archival Proceedings

[1] Muhammad Saad, Afsah Anwar, Srivatsan Ravi, and David Mohaisen. "Revisiting Nakamoto Consensus in Asynchronous Networks: A Comprehensive Analysis of Bitcoin Safety and Chain Quality". *Proceedings of the 2021 ACM SIGSAC Conference on Computer and Communications Security*, **ACM CCS**, Seoul, Republic of Korea, November 14-19, 2021.

[2] Muhammad Saad, Songqing Chen, David Mohaisen, "Root Cause Analyses for the Deteriorating Bitcoin Network Synchronization", *Proceedings of 41st IEEE International Conference on Distributed Computing Systems*, **IEEE ICDCS**, virtual, July 2021.

[3] Mazen Alwadi, David Mohaisen, Amro Awad, "ProMT: Optimizing Integrity Tree Updates for Write-Intensive Pages in Secure NVMs", International Conference on Supercomputing, **ACM/SIGARCH ICS**, virtual, July 2021.

[4] Ahmed Abusnaina, Afsah Anwar, Sultan Alshamrani, Abdulrahman Alabduljabbar, Rhongho Jang, and David Mohaisen. "Extended Abstract: Systemically Evaluating the Robustness of ML-based IoT Malware Detectors",*The 51st Annual IEEE/IFIP International Conference on Dependable Systems and Networks*, **IEEE DSN**, Taipei, Taiwan, June 21-24, 2021.

[5] Afsah Anwar, Ahmed Abusnaina, Songqing Chen, Frank Li, and David Mohaisen. "Cleaning the NVD: Comprehensive Quality Assessment, Improvements, and Analyses", *The 51st Annual IEEE/IFIP International Conference on Dependable Systems and Networks*, **IEEE DSN**, Taipei, Taiwan, June 21-24, 2021.

[6] Ahmed Abusnaina*, Rhongho Jang*, Aminollah Khormali*, DeaHun Nyang, and David Mohaisen:

"Deep Fingerprinting Defender: Adversarial Learning-based Approach to Defend Against Website Fingerprinting". *The 39th IEEE International Conference on Computer Communications*, **IEEE IN-FOCOM**, virtual, June 2020.

[7] Rhongho Jang⋆, Daehong Min, Seongkwang Moon, David Mohaisen, and DaeHun Nyang: "Sketch-Flow: Per-Flow Systematic Sampling Using Sketch Saturation Event". *The 39th IEEE International Conference on Computer Communications*, **IEEE INFOCOM**, virtual, June 2020.

[8] Hisham Alasmary⋆, Ahmed Abusnaina⋆, Rhongho Jang⋆, Mohammed Abuhamad⋆, Afsah Anwar⋆, Daehun Nyang, and David Mohaisen: "Soteria: Detecting Adversarial Examples in Control Flow Graph-based Malware Classifiers". *Proceedings of 40th IEEE International Conference on Distributed Computing Systems*, **IEEE ICDCS**, virtual, December 2020..

[9] Ulku Meteriz⋆, Necip Fazil Yaldiran⋆, Joongheon Kim, and David Mohaisen: "Understanding the Potential Risks of Sharing Elevation Information on Fitness Applications". *Proceedings of 40th IEEE International Conference on Distributed Computing Systems*, **IEEE ICDCS**, virtual, December 2020..

[10] Mohammed Abuhamad⋆, Tamer Abuhmed, DaeHun Nyang, and David Mohaisen: "Multi-X: Identifying Multiple Authors from Source Code Files". In Proceedings of the Privacy Enhancing Technologies Symposium (**PoPETS 2020**), virtual.

[11] Afsah Anwar⋆, Hisham Alasmary⋆, Jeman Park⋆, An Wang, Songqing Chen and David Mohaisen. "Statically Dissecting Internet of Things Malware: Analysis, Characterization, and Detection". *The 22nd International Conference on Information and Communications Security*, **ICICS 2020**, virtual.

[12] Ahmed Abusnaina⋆, Mohammed Abuhamad⋆, Daehun Nyang, Songqing Chen, An Wang and David Mohaisen. "Insights into Attacks' Progression: Prediction of Spatio-Temporal Behavior of DDoS Attacks". In *Proceedings of the 21st International Conference on Information Security Applications*, **WISA 2020**, Jeju, Korea, August 22-25, 2020.

[13] Sultan Alshamrani, Ahmed Abusnaina, Mohammed Abuhamad, Anho Lee, DaeHun Nyang, David Mohaisen. "An Analysis of Users Engagement on Twitter During the COVID-19 Pandemic: Topical Trends and Sentiments". *International Conference on Computational Data and Social Networks* (**CSoNET**), 2020. Virtual.

[14] Ahmed Abusnaina⋆, Hisham Alasmary⋆, Mohammed Abuhamad⋆, Saeed Salem, DaeHun Nyang, and David Mohaisen, "Subgraph-based Adversarial Examples Against Graph-based IoT Malware Detection Systems". *International Conference on Computational Data and Social Networks*, **CSoNet**, 2019.

[15] David Mohaisen, Songqing Chen: "Computer Systems Have 99 Problems, Let's Not Make Machine Learning Another One". *IEEE International Conference on Trust, Privacy and Security in Intelligent Systems, and Applications* (**IEEE TPS**), Los Angeles, CA, USA, Dec 12-14, 2019.

[16] Ahmed Abusnaina⋆, Aminollah Khormali⋆, DaeHun Nyang, Murat Yuksel, David Mohaisen: "Examining the Robustness of Learning-Based DDoS Detection in Software Defined Networks". In *Proceeding of IEEE Conference on Dependable and Secure Computing*, (**IEEE DSC 2019**), Hangzhou, China. November 18-0, 2019. **Best Paper–Runner Up Award**.

[17] Jinchun Choi⋆, Ahmed Abusnaina⋆, Afsah Anwar⋆, An Wang, Songqing Chen, Daehun Nyang, David Mohaisen: "Honor Among Thieves: Towards Understanding the Dynamics and Interdependencies in IoT Botnets". In *Proceeding of IEEE Conference on Dependable and Secure Computing*, (**IEEE DSC 2019**), Hangzhou, China. November 18-0, 2019.

[18] Muhammad Saad⋆, Amin Khormali⋆, and David Mohaisen. "Dine and Dash: Static, Dynamic, and Economic Analysis of In-Browser Cryptojacking", In *the Symposium on Electronic Crime Research*, **eCrime**, Pittsburgh, PA, USA. Nov 13-15, 2019.

[19] Changhun Jung⋆, Jumabek Alikhanov⋆, Mohammed Abuhamad⋆, David Mohaisen, Kyungja Han, DaeHun Nyang: "W-Net: A CNN-based Architecture for White Blood Cells Image Classification". In *Proceedings of the AAAI Fall Symposium on AI for Social Good* (**AAAI Fall Symposium**), Arlington,

VA, USA. November 7-9, 2019.

[20] Jeman Park[*], Aminollah Khormali[*], Manar Mohaisen, and David Mohaisen: "Where Are You Taking me? Behavioral Analysis of Open DNS Resolvers". *The 49th Annual IEEE/IFIP International Conference on Dependable Systems and Networks*, **IEEE DSN**, Portland, Oregon, June 22-25, 2019.

[21] Joohyung Jeon[*], Junhui Kim[*], Joongheon Kim, Kwangsoo Kim, David Mohaisen, and Jong-Kook Kim: "Fast Abstract: Privacy-Preserving Deep Learning Computation for Geo-Distributed Medical Big-Data Platforms". *The 49th Annual IEEE/IFIP International Conference on Dependable Systems and Networks*, **IEEE DSN**, Portland, Oregon, June 22-25, 2019.

[22] Muhammad Saad[*], Victor Cook[*], Lan Nguyen[*], My T. Thai and David Mohaisen: "Partitioning Attacks on Bitcoin: Colliding Space, Time, and Logic". *Proceedings of 39th IEEE International Conference on Distributed Computing Systems*, **IEEE ICDCS**, Dallas, Texas, USA. July 7-10, 2019.

[23] Ahmed Abusnaina[*], Aminollah Khormali[*], Hisham Alasmary[*], Jeman Park[*], Afsah Anwar[*] and David Mohaisen: "Adversarial Learning Attacks on Graph-based IoT Malware Detection Systems". *Proceedings of 39th IEEE International Conference on Distributed Computing Systems*, **IEEE ICDCS**, Dallas, Texas, USA. July 7-10, 2019.

[24] Rhongho Jang[*], Seongkwang Moon, Youngtae Noh, David Mohaisen and Daehun Nyang: "InstaMeasure: Instant Per-flow Detection UsingLarge In-DRAM Working Set of Active Flows". *Proceedings of 39th IEEE International Conference on Distributed Computing Systems*, **IEEE ICDCS**, Dallas, Texas, USA. July 7-10, 2019.

[25] An Wang, David Mohaisen and Songqing Chen: "XLF: A Cross-layer Framework to Secure the Internet of Things (IoT)". *Proceedings of 39th IEEE International Conference on Distributed Computing Systems*, **IEEE ICDCS**, Dallas, Texas, USA. July 7-10, 2019.

[26] Muhammad Saad[*], Laurent Njilla, Charles Kamhoua, Joongheon Kim, DaeHun Nyang, and David Mohaisen: "Mempool Optimization for Defending Against DDoS Attacks in PoW-based Blockchain Systems". *Proceedings of the IEEE International Conference on Blockchain and Cryptocurrency*, **IEEE ICBC**, Seoul, South Korea, 14-17 May 2019.. *The 16th Annual Conference on Privacy, Security and Trust*, **IEEE PST**, Belfast, Northern Ireland, United Kingdom, August 28-30, 2018. (AR: **19.6%**)

[27] Muhammad Saad[*], Afsah Anwar[*], Ashar Ahmad[*], Hisam Alasmary[*], Murat Yukesl, and David Mohaisen: "RouteChain: Towards Blockchain-based Secure and Efficient BGP Routing". *Proceedings of the IEEE International Conference on Blockchain and Cryptocurrency*, **IEEE ICBC**, Seoul, South Korea, 14-17 May 2019. *The 16th Annual Conference on Privacy, Security and Trust*, **IEEE PST**, Belfast, Northern Ireland, United Kingdom, August 28-30, 2018. (AR: **19.6%**)

[28] Jeman Park, David Mohaisen, Charles A. Kamhoua, Michael J. Weisman, Nandi O. Leslie, Laurent Njilla: "Cyber Deception in the Internet of Battlefield Things: Techniques, Instances, and Assessments". In *the 20th International Conference on Information Security Applications*, **WISA 2019**, Jeju, Korea, August 21-24, 2019.

[29] Ashar Ahmad[*], Muhammad Saad[*], Laurent Njilla, Charles A. Kamhoua Mostafa Bassiouni, and David Mohaisen: "BlockTrail: A Scalable Multichain Solution for Blockchain-based Audit Trails", *IEEE International Conference on Communications*, **IEEE ICC**, Shanghai, China, May 18-22, 2019.

[30] Hisham Alasmary[*], Afsah Anwar[*], Jeman Park[*], Jinchun Choi[*], Daehun Nyang, and David Mohaisen: "Graph-based Comparison of IoT and Android Malware", In *The International Conference on Computational Data and Social Networks*, **CSoNet**, 2018

[31] Mohammed Abuhmed[*], Tamer Abuhmed, David Mohaisen, DaeHun Nyang: "Large-Scale and Language-Oblivious Code Authorship Identification", *Proceedings of the 2018 ACM SIGSAC Conference on Computer and Communications Security*, **ACM CCS**, Toronto, Canada, October 13-17, 2018.

[32] Jeman Park[*], DaeHun Nyang, David Mohaisen: "Timing is Almost Everything: Realistic Evaluation of the Very Short Intermittent DDoS Attacks". *The 16th Annual Conference on Privacy, Security and*

*Trust*, **IEEE PST**, Belfast, Northern Ireland, United Kingdom, August 28-30, 2018. (AR: **30%**)

[33] Zhongjie Ba⋆, Sixu Piao⋆, Xinwen Fu, Dimitrios Koutsonikolas, David Mohaisen, Kui Ren. "ABC: Enabling Smartphone Authentication with Built-in Camera", *Proceeding of the Network and Distributed System Security Symposium*, **ISOC NDSS**, San Diego, CA, USA, Feb 21-24, 2018. (AR: **20%**)

[34] Sungha Baek⋆, Youngdon Jung⋆, David Mohaisen, Sungjin Lee and Daehun Nyang: "SSD-Insider: Internal Defense of Solid-State Drive against Ransomware with Perfect Data Recovery". *Proceedings of 38th IEEE International Conference on Distributed Computing Systems*, **IEEE ICDCS**, Vienna, Austria, Jul 2-6, 2018. (AR: **20%**)

[35] Shinyoung Ahn⋆, Joongheon Kim, Eunji Lim⋆, Wan Choi, David Mohaisen and Sungwon Kang: "ShmCaffe: A Distributed Deep Learning Platform with Shared Memory". *Proceedings of 38th IEEE International Conference on Distributed Computing Systems*, **IEEE ICDCS**, Vienna, Austria, Jul 2-6, 2018. (AR: **20%**)

[36] Afsah Anwar⋆, Aminollah Khormali⋆ and David Mohaisen: "Understanding the Hidden Cost of Software Vulnerabilities: Measurements and Predictions". *Proceeding of The 14th EAI International Conference on Security and Privacy in Communication Networks*, **SecureComm**, Singapore, Singapore, August 8–10, 2018. (AR: **29.6%**)

[37] Jeman Park⋆, Hisham Alasmary⋆, Omar Al-Ibrahim‡, Charles Kamhoua, Kevin Kwiat, Laurent Njilla, David Mohaisen: "QOI: Assessing Participation in Threat Information Sharing". *Int'l Conference on Acoustics, Speech, and Signal Processing*, **IEEE ICASSP**, Calgary, AL, Canada, April 15–20, 2018.

[38] Changhun Jung⋆, Jeonil Kang‡, David Mohaisen, DaeHun Nyang: "DIGITALSEAL: A Transaction Authentication Tool for Online and Offline Transactions". *Int'l Conference on Acoustics, Speech, and Signal Processing*, **IEEE ICASSP**, Calgary, AL, Canada, April 15–20, 2018.

[39] Jeffrey Spaulding⋆, Jeman Park⋆, Joongheon Kim, David Mohaisen: "Proactive Detection of Algorithmically Generated Malicious Domains". *The 32nd International Conference on Information Networking*, **IEEE ICOIN**, Chiang Mai, Thailand, Jan 10-12, 2018. (AR: **41%**)

[40] Si Chen⋆, Sixu Piao⋆, Cong Wang, Qian Wang, Jian Weng, Lu Su, Kui Ren, David Mohaisen: "You Can Hear But You Cannot Steal: Defending against Voice Impersonation on Smartphones", *The 37th IEEE Int'l Conf on Distributed Computing Systems*, **IEEE ICDCS**, Atlanta, GA, USA, Jun 5-7, 2017. (AR: **17%**). **Best Student Paper Award**.

[41] David Mohaisen, Zhongshu Gu, and Kui Ren: "Privacy Implications of DNSSEC Look-aside Validation". *The 37th IEEE Int'l Conf on Distributed Computing Systems*, **IEEE ICDCS**, Atlanta, GA, USA, Jun 5-7, 2017. (AR: **17%**)

[42] Feng Shen⋆, Justin Del Vecchio⋆, David Mohaisen, Steven Y. Ko and Lukasz Ziarek: "Android Malware Detection using Multi-Flows and API Patterns". *The 37th IEEE Int'l Conf on Distributed Computing Systems*, **IEEE ICDCS**, Atlanta, GA, USA, Jun 5-7, 2017. (AR: **17%**)

[43] An Wang⋆, Songqing Chen, David Mohaisen: "An Adversary-Centric Behavior Modeling of DDoS Attacks". *The 37th IEEE Int'l Conf on Distributed Computing Systems*, **IEEE ICDCS**, Atlanta, GA, USA, Jun 5-7, 2017. (AR: **17%**)

[44] Chaowen Guan⋆, David Mohaisen, Z. Sun, F. Wei, L. Su, K. Ren, Y. Yang: "When Smart TV Meets CRN: Privacy-preserving Fine-grained Spectrum Accessing for Secondary Users". *The 37th IEEE Int'l Conf on Distributed Computing Systems*, **IEEE ICDCS**, Atlanta, GA, USA, Jun 5-7, 2017. (AR: **17%**)

[45] Qian Wang, Kui Ren, Minxin Du, and David Mohaisen: "SecGDB: Graph Encryption for Exact Shortest Distance Queries with Efficient Updates". Proceedings of the Twenty-First International Conference of Financial Cryptography and Data Security, **FC**, Malta, April 3–7, 2017. (AR: **25%**)

[46] Fan Dang⋆, Pengfei Zhou⋆, Zhenhua Li, Ennan Zhai‡, David Mohaisen, Qingfu Wen, and Mo Li: "large-scale Invisible Attack on AFC Systems with NFC-equipped Smartphones". In *The 36th IEEE*

*International Conference on Computer Communications*, **IEEE INFOCOM**, Atlanta, GA, USA, May 1-4, 2017. (AR: **20%**)

[47] Wentao Chang[*], An Wang[*], Songqing Chen, and David Mohaisen: "Understanding Adversarial Strategies in Modern Botnets from Bot Recruitment to Scheduling". *Proceeding of The 13th EAI International Conference on Security and Privacy in Communication Networks*, **SecureComm**, Niagara Falls, NY, Canada, October 22–24, 2017. (AR: **29.5%**)

[48] Eunjo Lee[*], Jiyoung Woo[‡], Hyoungshick Kim, David Mohaisen, Huy Kang Kim: "You Are a Game Bot!: Uncovering game bots in MMORPGs via self-similarity in the wild". In *Proceeding of the Network and Distributed System Security Symposium*, **ISOC NDSS**, 2016. (AR: **15%**)

[49] David Mohaisen, Ah Reum Kang[‡], and Kui Ren: "Does Query Blocking Improve DNS Privacy?" In *Proceedings of the 17th International Conference on Information Security Applications*, **WISA**, Jeju, Korea, Aug 25-27, 2016. (AR: **50%**)

[50] An Wang[*], David Mohaisen, Wentao Chang[*], Songqing Chen: "Measuring and Analyzing Trends in Recent Distributed Denial of Service Attacks". In *Proceedings of the 17th International Conference on Information Security Applications*, **WISA**, Jeju, Korea, Aug 25-27, 2016.

[51] Jeffrey Spaulding[*], Shambhu Upadhyaya and David Mohaisen: "The Landscape of Domain Name Typosquatting: Techniques and Countermeasures". In *Proceeding of the Int.'l Conference on Availability, Reliability and Security*, **IEEE ARES**, Salzburg, Austria, Aug 31-Sep 2, 2016. (AR: **30%**).

[52] Hesham Z. Mekky[*], David Mohaisen, and Zhi-Li Zhang: "Separation of benign and malicious network events for accurate malware family classification". In *Proceeding of the 2015 IEEE Conference on Communications and Network Security*, **IEEE CNS**, Florence, Italy, Sep. 28-30, 2015. (AR: **28%**)

[53] An Wang[*], David Mohaisen, Wentao Chang[*], and Songqing Chen: "Capturing DDoS Attack Dynamics Behind the Scenes", In *Proceedings of the 12th International Conference on Detection of Intrusions and Malware, and Vulnerability Assessment*, **DIMVA**, Milan, Italy, August 9-10, 2015. (AR: **22.7%**)

[54] An Wang[*], David Mohaisen, Wentao Chang[*], and Songqing Chen: "Delving into Internet DDoS Attacks by Botnets: Characterization and Analysis". In *The 45th Annual IEEE/IFIP Int'l Conf on Dependable Systems and Networks*, **IEEE DSN**, Rio de Janeiro, Brazil, June 22-25, 2015. (AR: **21.8%**).

[55] Wentao Chang[*], David Mohaisen, An Wang[*], and Songqing Chen: "Measuring Botnets in the Wild: Some New Trends". In *The 10th ACM Symposium on Information, Computer and Communications Security*, **ACM ASIACCS**, Singapore, April 14-17, 2015. (AR: **22.3%**)

[56] David Mohaisen, Omar Alrawi[*], Andrew West, Allison Mankin: "Chatter: Classifying malware families using system event ordering ". In *Proceeding of the IEEE Conference on Communications and Network Security*, **IEEE CNS**, San Francisco, CA, USA, October 29-31, 2014 (AR: **26%**).

[57] David Mohaisen and Matt Thomas: "Measuring the Leakage of Onion at the Root". In *Proceedings of the 13th Workshop on Privacy in the Electronic Society*, **ACM WPES**, 2014. (AR: **25%**)

[58] Galileo Namata, Andrew G. West, and David Mohaisen. "Web of Redirection: Measuring Domain Forwarding and Applications at Internet-scale" In *Proceedings of the 2014 Internet Measurement Conference*, **ACM IMC**, Vancouver, BC, Canada, November 5-7, 2014. (AR: **22%**) (withdrawn by verisign).

[59] David Mohaisen and Omar Alrawi[*]: "AV-Meter: An Evaluation of Antivirus Scans and Labels". In *Proceedings of the 11th International Conference on Detection of Intrusions and Malware, and Vulnerability Assessment*, **DIMVA**, Egham, UK, July 10-11, 2014. (AR: **23.3%**)

[60] Andrew West and David Mohaisen: "Metadata-driven Threat Classification of Network Endpoints Appearing in Malware". In *Proceedings of the 11th International Conference on Detection of Intrusions and Malware, and Vulnerability Assessment*, **DIMVA**, Egham, UK, July 10-11, 2014. (AR: **23.3%**)

[61] Ahmed Kosba*, David Mohaisen, Andrew West, Trevor Tonn, Huy Kang Kim: "ADAM: Automated Detection and Attribution of Malicious Webpages". In *Proceedings of the 15th International Conference on Information Security Applications*, **WISA**, Jeju, Korea, Aug 25-27, 2014. (AR: **33%**)

[62] Hyun Jae Kang*, Jae-wook Jang*, David Mohaisen and Huy Kang Kim: "AndroTracker: Creator Information based Android Malware Classification System". In *Proceedings of the 15th International Conference on Information Security Applications*, **WISA**, Jeju, Korea, Aug 25-27, 2014. (AR: **33%**)

[63] David Mohaisen, Mansurul Bhuiyan*, and Yannis Labrou: "Name Server Switching: Anomaly Signatures, Usage, Clustering, and Prediction". In *Proceedings of the 15th International Conference on Information Security Applications*, **WISA**, Jeju, Korea, Aug 25-27, 2014. (AR: **33%**)

[64] David Mohaisen and Omar Alrawi*: "High-Fidelity, Behavior-based Automated Malware Analysis and Classification." In *Proceedings of the 15th International Conference on Information Security Applications*, **WISA**, Jeju, Korea, Aug 25-27, 2014. (AR: **33%**). **Best Paper Award**.

[65] Youngbae Song*, Hyoungshick Kim and David Mohaisen: "A Private Walk in the Clouds". In *Proceedings of the 11th International Conference on Trust*, Privacy, and Security in Digital Business, **TrustBus**, Munich, Germany, September 2-3, 2014. (AR: **30%**)

[66] David Mohaisen, Omar Alrawi*, Matt Larson, and Danny McPherson: "Towards A Methodical Evaluation of Antivirus Scans and Labels". In *Proceedings of the 14th International Conference on Information Security Applications*, **WISA**, Jeju, Korea, August 19-21, 2013. (AR: **30%**)

[67] David Mohaisen, Xinwen Zhang, Max Schuchard*, Haiyong Xie, Yongdae Kim: "Protecting Access Privacy of Cached Contents in Information Centric Networks". In *The 8th ACM Symposium on Information, Computer and Communications Security*, **ACM ASIACCS**, Hangzhou, China - May 08-10, 2013. (AR: **28%**).

[68] David Mohaisen, Huy Tran*, Abhishek Chandra, and Yongdae Kim: "Trustworthy distributed computing on social networks". In *The 8th ACM Symposium on Information, Computer and Communications Security*, **ACM ASIACCS**, Hangzhou, China - May 08-10, 2013. (AR: **28%**)

[69] David Mohaisen and Yongdae Kim. "Dynamix: anonymity on dynamic social structures". In *The 8th ACM Symposium on Information, Computer and Communications Security*, **ACM ASIACCS**, Hangzhou, China - May 08-10, 2013. (AR: **28%**)

[70] Myungsun Kim*, David Mohaisen, Jung Hee Cheon, Yongdae Kim: "Private Over-threshold Aggregation Protocols". In *Proceedings of the 15th International Conference on Information Security and Cryptology*, **ICISC**, Seoul, Korea, November 28-30, 2012. (AR: **25%**)

[71] David Mohaisen, Huy Tran*, Nicholas Hopper, and Yongdae Kim: "On the Mixing Time of Directed Social Graphs and Security Implications". In *The 7th ACM Symposium on Information, Computer and Communications Security*, **ACM ASIACCS**, Seoul, Korea, May 2-4, 2012. (AR: **18%**)

[72] Ting Zhu, David Mohaisen, Yi Ping, and Don Towsley: "DEOS: Dynamic energy-oriented scheduling for sustainable wireless sensor networks". In *The 31st IEEE International Conference on Computer Communications*, **IEEE INFOCOM**, Orlando, FL, USA, March 25-30, 2012. (AR: **18%**).

[73] David Mohaisen, Pengkui Luo, Yanhua Li, Yongdae Kim, Zhi-Li Zhang: "Measuring Bias in the Mixing Time of Social Graphs due to Graph Sampling". In *Proceedings of the 2012 Military Communications Conference*, **IEEE MILCOM**, Orlando, FL, USA, Oct 29, 2012. (AR: **38%**)

[74] David Mohaisen, Tamer AbuHmed, Ting Zhu, and Manar Mohaisen: "Collaboration in social network-based information dissemination". In *IEEE International Conference on Communications*, **IEEE ICC**, Ottawa, ON, Canada, June 10-15, 2012. (AR: **36%**)

[75] David Mohaisen, Nicholas Hopper, and Yongdae Kim: "Keep your friends close: Incorporating trust into social network-based sybil defenses". In *The 30th IEEE International Conference on Computer Communications*, **IEEE INFOCOM**, Shanghai, China, April 10-15, 2011. (AR: **16%**).

[76] Max Schuchard, David Mohaisen, Eugene Vasserman, Denis Foo Kune, Nicholas Hopper, and Yongdae Kim: "Losing control of the internet: using the data plane to attack the control plane". In *Pro-*

*ceedings of the Network and Distributed System Security Symposium*, **ISOC NDSS**, San Diego, CA, USA, Feb 6-9, 2011. (AR: **18%**).

[77] David Mohaisen, Tamer AbuHmed, Hun Jeong Kang, Yongdae Kim, and DaeHun Nyang: "Mistaking friends for foes: an analysis of a social network-based sybil defense". In *Proceedings of the 5th International Conference on Ubiquitous Information Management and Communication*, **ACM IMCOM**, Seoul, Korea, 2011. (AR: **25%**)

[78] Manar Mohaisen, David Mohaisen, Yanhua Li, and Pengkui Luo: "Parallel QRD-M encoder for decentralized multi-user MIMO systems". In *IEEE International Conference on Communications*, **IEEE ICC**, Kyoto, Japan, 5-9 June, 2011. (AR: **38%**)

[79] David Mohaisen, Aaram Yun, and Yongdae Kim: "Measuring the mixing time of social graphs". In *Proceedings of the 10th ACM Internet Measurement Conference*, **ACM IMC**, Melbourne, Australia, Nov 1-3, 2010. (AR: **22%**)

[80] David Mohaisen, Nam-Su Jho, and Dowon Hong: "A computationally-efficient construction for key distribution in sensor network". In *Proceedings of the Third International Conference on Advances in Information Security and Assurance*, **IEEE ISA**, Seoul, Korea, June 25-27, 2009. (AR: **29.9%**)

[81] David Mohaisen and Dowon Hong: "Privacy preserving association rule mining revisited". In *Proceedings of the 9th International Conference on Information Security Applications*, **WISA**, Jeju, Korea, September 23-25, 20-8. (AR: **25%**)

[82] David Mohaisen, Dowon Hong, and DaeHun Nyang: "Privacy in location based services: Primitives toward the solution". In *The 4th International Conference on Networked Computing and Advanced Information Management*, **IEEE NCM**, Gyeongju, Korea, September 2-4, 2008. (AR: **30%**)

[83] David Mohaisen, Ik Rae Jeong, Dowon Hong, Nam-Su Jho, and DaeHun Nyang: "Data randomization for lightweight data aggregation". In *The 5th Int'l Conf. on Ubiquitous Intel. and Computing*, **IEEE UIC**, Oslo, Norway, June 23-25, 2008. (AR: **26%**)

[84] David Mohaisen, Youngjae Maeng, Jeonil Kang, Daehun Nyang, Kunghee Lee, Dowon Hong, and J. Han: "Protection techniques of secret information in devices of smart home network". In *The 5th Int'l Conf. on Ubiquitous Intel. and Computing*, **IEEE UIC**, Oslo, Norway, June 23-25, 2008. (AR: **26%**)

[85] YoungJae Maeng, David Mohaisen, and DaeHun Nyang: "Secret key revocation in sensor networks". In *Proceedings of the 4th International Conference on Ubiquitous Intelligence and Computing*, **IEEE UIC**, Hong Kong, China, July 11-13, 2007. (AR: **25.7%**)

[86] David Mohaisen, DaeHun Nyang, YoungJae Maeng, and KyungHee Lee: "Structures for communication-efficient public key revocation in ubiquitous sensor network". In *The 3rd Int'l Conference on Mobile Ad-Hoc and Sensor Networks*, **IEEE MSN**, Beijing, China, December 12-14, 2007. (AR: **24.7%**)

[87] David Mohaisen and DaeHun Nyang: "Hierarchical grid-based pairwise key predistribution scheme for wireless sensor networks". In *Third European Conference on Wireless Sensor Networks*, **EWSN 2006**, Zurich, Switzerland, February 13-15, 2006. (AR: **15.8%**).

[88] DaeHun Nyang and David Mohaisen: "Cooperative public key authentication protocol in wireless sensor network". In *Proceedings of the 3rd International Conference on Ubiquitous Intelligence and Computing*, **IEEE UIC**, Wuhan, China, September 3-6, 2006. (AR: **30%**)

## 3.2  Workshop Publications with Archival Proceedings

[89] Sultan Alshamrani⋆, Ahmed Abusnaina⋆, DaeHun Nyang, David Mohaisen. "Hate, Obscenity, and Insults: Measuring the Exposure ofChildren to Inappropriate Comments in YouTube". The 9th International Workshop on Natural Language Processing for Social Media (SocialNLP), 2021. In conjunction with WWW 2021.

[90] Ashar Ahmad⋆, Muhammad Saad⋆, Joongheon Kim, DaeHun Nyang, David Mohaisen: "Performance Evaluation of Consensus Protocols in Blockchain-based Audit Systems." *The 35th International Con-*

*ference on Information Networking*, **ICOIN 2021**, Jan 10-12, 2021 (virtual).

[91] Myungjae Shin⋆, David Mohaisen, Joongheon Kim: "Bitcoin Price Forecasting via Ensemble-based LSTM Deep Learning Networks". *The 35th International Conference on Information Networking*, **ICOIN 2021**, Jan 10-12, 2021 (virtual).

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## 3.3 Poster Abstracts, Demos, and Tutorials

Note: Those are lightly peer-reviewed publications in proceedings.

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[113] Jinchun Choi, Afsah Anwar, Hisham Alasmary, Jeffrey Spaulding, DaeHun Nyang, David Mohaisen: "Analyzing endpoints in the internet of things malware: poster". *The 12th ACM Conference on Security and Privacy in Wireless and Mobile Networks*, **ACM WiSec**, 2019.

[114] Ahmed Abusnaina, Hisham Alasmary, Jeman Park, Afsah Anwar, Ulku Meteriz, David Mohaisen: "Breaking graph-based IoT malware detection systems using adversarial examples: poster". *The 12th ACM Conference on Security and Privacy in Wireless and Mobile Networks*, **ACM WiSec**, 2019.

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[123] David Mohaisen and Joongheon Kim. "Tutorial: Securing the Internet of Things: Machine Learning Approach". *IEEE International Conference on Communications*, **IEEE ICC**, Kansas City, MO, USA, May 20-24, 2018.

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## 3.4 Panels

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## 3.7 Patents

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[200] 10,038,706: Systems, devices, and methods for separating malware.. events (w/ Mekky)

[201] *9,769,189:* Systems and methods for behavior-based malware.. classification (w/ Alrawi)

[202] *9,578,125:* Systems, devices, and methods for.. privacy of cached content (sole)

[203] *9,489,514:* Classifying malware by order of behavior artifacts (w/ Mankin and Tonn)

[204] *8,745,696:* Apparatus and method for privacy protection in.. rule mining (w/ Jho and Hong)

[205] *8,112,386: Rotation based transformation method and for.. data privacy* (w/ Hong)

[206] *15/147,387: Methods and systems for DNDN* (w/ Osterweil, Murray, and Mcpherson)

[207] *14/868,594: Access control for named domain networking* (w/ Shirvanian and Murray)

## 3.8 Selected Invited Talks

Towards Taming Adversarial Examples: Security Applications Perspectives
**01/2021.** 35th International Conference on Information Networking (tutorial, virtual)

Malware Analysis and Classification with Machine Learning
**04/2021.** University of Texas, San Antonio (virtual)
**02/2021.** Howard University, Washington, D.C. (virtual)
**02/2021.** UCF Technology Ventures Symposium (virtual)
**11/2020.** University of Massachusetts Dartmouth (virtual)
**08/2020.** Summer School of System Security at Zhejiang University (virtual)

Large-Scale and Language-Oblivious Code Authorship Identification
**11/2019.** George Mason University
**02/2019.** Embry-Riddle Aeronautical University
**12/2018.** Zhejiang University

Understanding blockchain systems via attack surface analysis
**06/2019.** IEEE LightChain 2019 (keynote)
**06/2019.** ETRI, Republic of Korea
**06/2019.** Air Force Research Lab

Securing the Internet of Things: A Machine Learning Approach
**06/2018.** Inha University
**05/2018.** IEEE ICC 2018 (tutorial)

Assessing the Attack Surface of Blockchain
**11/2017.** Army/CERDEC symposium on blockchain, MD
**06/2017.** NATO Innovation Hub/Old Dominion, VA
**06/2017.** Air Force Research Laboratory, Rome, NY

A data-driven approach to DDoS defenses
**08/2016.** Korea University, Seoul, Korea
**08/2016.** Chung Ang University, Seoul, Korea
**08/2016.** SungKyunKwan University, Suwon, Korea
**08/2016.** Soongshil University, Seoul, Korea
**08/2016.** ETRI, Daejeon, Korea
**08/2016.** Air Force Research Lab, Rome, NY

Measurement of Leakage of .Onion at the Root
**10/2014.** University of California, Irvine
**10/2014.** ICANN 51, Los Angeles

Dissecting bad codes with AMAL, Chatter, and AVMeter
**05/2015.** University at Buffalo

**04/2014.** Princeton University
**04/2014.** Virginia Tech
**10/2013.** George Mason University
**08/2013.** Korea Advanced Institute of Science and Technology
**08/2013.** Korea University

Towards Trustworthy Computing on Social Networks
**04/2012.** Verisign Labs
**01/2012.** Princeton University

## 4    Advising Record

### 4.1    Graduated Doctoral Students

**Muhammad Saad.**  (2021) Research Scientist at PayPal
**Afsah Anwar.**  (2021; pending defense) Postdoc at Northeastern University with Alina Oprea
**Sultan Alshamrani.**  (2021; pending defense) Tenure-track assistant professor, Saudi Electronic University.
**Jeman Park.**  (2020) Postdoctoral Researcher, Georgia Institute of Technology
**Jinchun Choi.**  (2020) Postdoctoral Researcher, Texas A&M University
**Mohammed Abuhamad.**  (2020) Tenure-track Assistant Professor, Loyola University, Chicago
**Rhongho Jang.**  (2020) Tenure-track Assistant Professor, Wayne State University
**Hisham Alasmary.**  (2020) Tenure-track Assistant Professor, King Khalid University
**Ashar Ahmad.**  (2019) Director of Research and Engineering, Clear Village Inc.
**Jeffrey Spaulding.**  (2018) Tenure-track Assistant Professor, Niagara University

### 4.2    Current Doctoral Students

**Ahmad Abusnaina.**  Ph.D. Candidate (2018–)
**Ulku Meteriz.**  Ph.D. Candidate (2018–)
**Abdulrahman Alabduljabbar.**  (2019–)
**Mohammed Al-Kinoon.**  (2020–)
**Ran Gedawi.**  (2021–)
**Soohyeon Choi.**  (2021–)
**Saleh Almohaimeed.**  (2021–)
**Saad Almohaimeed.**  (2021–)
**Marwan Omar.**  (2021–)

### 4.3    Hosted Postdocs

**Omar Al-Ibrahim.**  (2016–2017) Assistant Professor, Kuwait University
**Ah Reum Kang.**  (2016–2017) Assistant Professor, Soonchunhyang University.

### 4.4    Doctoral Dissertation Committee

**Hayreddin Ceker.**  (2017) University at Buffalo
**An Wang.**  (2018) George Mason University
**Amirali Sanatinia.**  (2018) Northeastern University
**Hossein Rezaeighaleh**  (2020) University of Central Florida (CS)
**Mazen Alwadi.**  (2020) University of Central Florida (ECE)

### 4.5    Visiting Scholars

**Mohammed Alghamdi.**  (2019; 3 months) Associate Professor at Um Alqura University
**DaeHun Nyang.**  (2017-2019, multiple visits) Professor at Ewha Womans University

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**Jihoon Lee.** (2019; 1 year) Associate Professor at Sangmyung University
**Anho Lee.** (2020; 3 months) Seoul National University

## 4.6 Masters Students (Completed)

**Necip Yildiran\*.** (2018–2020)
**Priyanka Gona.** (2019-2020)
**Samprati Upadhyay.** (2019-2020)
**Amin Khormali\*.** (2017-2019)
**Victor Cook\*\*.** (2017)
**Jesse Freeman.** (2016); SFS Scholar.
**Christopher Weeden.** (2016); SFS Scholar.
**Woodams Clark.** (2016); SFS Scholar.
**Joseph D'Amato.** (2016); SFS Scholar.
**Pranav Jain.** (2016); SFS Scholar.
\* started as PhD students in my group, then moved to pursue their PhD at UCF with other advisors.
\*\* switched topics/advisor without finishing the degree.

## 4.7 Undergraduate Students (Completed)

**Brett Fazio.** Computer Science (UGRA), University of Central Florida, 2021
**Willian Chen.** Computer Science (UGRA), University of Central Florida, 2021
**Gianni Lotz.** Computer Science (UGRA), University of Central Florida, 2019
**Mikal Young.** Computer Science (UGRA), University of Central Florida, 2019
**Connor Austin.** Computer Science (UGRA), University of Central Florida, 2018–2019
**Coty Toggle.** Computer Science (UGRA), University of Central Florida, 2018–2019
**Destinee Stephen.** Computer Science (UGRA), University of Central Florida, 2018–2019
**Brandon Gray.** Computer Science (UGRA), University of Central Florida, 2017-2018
**Shane Ferrell.** Computer Science (UGRA), University of Central Florida, 2017
**Brent Rademaker.** Computer Science (UGRA), University of Central Florida, 2017
**Jobin Joseph.** Computer Science (UGRA), University at Buffalo, SUNY, 2016
**David Weidenborner.** Computer Science (UGRA), University at Buffalo, SUNY, 2016

## 5 Teaching and Evaluation

I developed and offered eight courses (three at Buffalo) on systems security, applied cryptography, and natural language processing.My ratings have between 4 and 4.5 out of 5, well above the CS/CECS averages.
**CAP 6133.** Advanced Topics in Computer Security and Computer Forensic: offered Fall 2017 (12 students; 4.6/5), 2016 (24 students; 4.6/5), and 2015 (10 students, 5/5).
**CAP 5150.** Foundations of Computer Security and Privacy: offered Spring 2021 (21 students; 0/5), Spring 2020 (17 students, 4/5) and Spring 2017 (27 students; 4.0/5).
**CAP 6640.** Computer Understanding of Natural Language: offered Spring 2021 (43 students; 0/5), 2020 (48 students, 4.2/5), and 2019 (51 students, 4.0/5)
**CIS 4615.** Secure Software Development and Assurance: offered Fall 2018 (23 students, 4.5/5) and 2017 (22 students, 3.7/5).
**CIS4361.** Secure Operating Systems and Administration: offered Spring 2019 (59 students, 4.5/5)
**CNT 6908.** Independent Study: offered Spring 2020 (1 student) and Fall 2019 (1 student).

## 6 Service

## 6.1 University Service

**2021.** Member, Conflict of Interest Committee, College of Graduate Studies
**2021.** Member, Tenure and Promotion Committee, School of Modeling and Simulation

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**2021.** Chair, Inst. and Lecturers Promotion Committee, Department of Computer Science (elected)
**2020.** Chair, Inst. and Lecturers Promotion Committee, College of Engineering (elected)
**2019.** Lead, Graduate Admission Committee (Security Area), Computer Science
**2019.** Member, Promotion and Tenure Committee, Computer Science
**2019.** Member, Cyber Security and Privacy FCI Faculty Search Committee
**2019.** Member, Computer Science Faculty Search Committee
**2019.** Member, Promotion of Instructors/Lecturers, College of Engineering (elected)
**2018-2020.** Member, Faculty Senate
**2018-2020.** Member, College of Graduate Studies' Graduate Policy Committee
**2017.** Member, Cyber Security and Privacy FCI Lead Search Committee
**2017-2020.** Coordinator, INHA -UCF dual degree doctoral program
**2015-2017.** Member, Colloquium Committee (at Buffalo)
**2015-2017.** Member, Graduate Studies Committee (at Buffalo)
**2015-2017.** Member, Graduate Admission Committee (at Buffalo)

## 6.2 Membership in Organizing Committees

**2021.** Sponsorship co-chair, ACM CCS
**2021.** TPC co-chair, IEEE MSN 2021 (security and privacy track)
**2021.** TPC co-chair, IEEE ICDCS (blockchain track)
**2021.** TPC co-chair, CSoNET 2021
**2020–** , Vice Chair, Technical Committee on the Internet, IEEE Computer Society
**2020.** PC meeting co-chair, IEEE INFOCOM
**2020.** Tutorial chair, ACM/IEEE SEC
**2020.** Publicity co-chair, IEEE CNS
**2019.** General co-chair (with Z. Zhang), ACM CoNEXT
**2019.** TPC co-chair, EAI SECURECOMM
**2019.** TPC co-chair, IEEE ICPADS (security track)
**2019.** TPC co-chair, IEEE ICC (security track)
**2019.** Posters co-chair, ACM WiSec
**2019.** Workshops chair, ACM/IEEE SEC
**2019.** Workshops co-chair, IEEE DSC
**2018.** TPC co-chair, IEEE ICASSP (security track)
**2018.** TPC co-chair, IEEE MASS (security track)
**2018.** TPC co-chair, ACM AsiaCCS-SCC
**2018.** Publicity co-chair, ACM ASIACCS
**2017.** Treasurer, ACM MobiSys
**2016.** Travel co-chair, IEEE CNS

## 6.3 Journal Editorial Board

**2021–** , Associate Editor, IEEE Transactions on Cloud Computing
**2020–** , Associate Editor, IEEE Transactions on Parallel and Distributed Systems
**2018–** , Associate Editor, IEEE Transactions on Mobile Computing
**2019–** , Associate Editor, Elsevier Computer Networks
**2017–** , Area Editor, ETRI Journal
**2019–2021** , co-Editor-in-Chief, EAI Transactions on Security and Safety

## 6.4 Program Committee Member

**2021.** AAAI, ICDCS, WiSec, PETS, INFOCOM, NETYS
**2020.** PETS, ICDCS, INFOCOM, CIC, WiSec, CIC, SecureComm

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**2019.** PETS, ICDCS, INFOCOM, CNS, SecureComm
**2018.** AsiaCCS, ICDCS, INFOCOM, CNS, SecureComm, ICWSM, NDSS
**2017.** ICDCS, INFOCOM, CNS, SecureComm, DBSEC
**2016.** AsiaCCS, CNS, SecureComm, ICWSM, DBSEC
**2015.** AsiaCCS, DIMVA, WWW
**2014.** AsiaCCS, ICDCS, CNS, ICWSM, DIMVA, WWW
**2013.** ICISC, Networking

**Journals Reviewer**

**2015.** ACM Computing Surveys
**2013-2021.** ACM Transactions on Information and System Security
**2013-2021.** ACM/IEEE Transactions on Networking
**2007-2017.** ETRI Journal
**2012-2015.** IEEE Communication Letters
**2015-2019.** IEEE Transactions on Cloud Computing
**2012-2021.** IEEE Transactions on Dependable and Secure Computing
**2014-2019.** IEEE Transactions on Mobile Computing
**2016-2019.** IEEE Transactions on Services Computing
**2016-2019.** IEEE Transactions on Big Data
**2014-2018.** IEEE Transactions on Knowledge and Data Engineering
**2017-2021.** IEEE Transactions on Internet of Things
**2019.** IEEE Internet Computing
**2017.** IET Information Security
**2013-2015.** Journal of Communications and Networks
**2019.** Proceedings of IEEE
**2019-2020.** Elsevier Journal of Network and Computer Applications
**2013-2015.** Security and Communication Networks
**2017.** Springer Cluster Computing
**2014-2015.** Springer Computational Social Networks
**2013-2017.** Springers International Journal of Information Security
**2015.** Springer Journal of Supercomputing
**2011-2015.** KSII Transactions on Internet and Information Systems

## 6.5   Funding Proposals Reviewer

US National Science Foundation (2021, 2020, 2019, 2018, 2017, 2016). Programs include CPS, CSR, NeTS, SaTC, and CAREER.
European Research Council (ERC; 2018)
US Department of Homeland Security (2019, 2018, 2016)
US Army Research Office (2017)
US–Israel Binational Science Foundation (BSF; subreviewer, 2013, 2012)
National Science Centre (Narodowe Centrum Nauki of Poland (NCN; 2018)

## 7   Media Coverage

01/17/2020, FoxNews, Demands for Apple to unlock shooter's phone not so simple
12/19/2017, ACM Tech News, Your Smartphone's Next Trick? Fighting Cybercrime
12/15/2017, New Atlas, Using smartphone photos as fingerprints could help fight...
06/12/2017, The Register, Who will save us from voice recog foolery...
06/09/2017, Edgy Labs, How This app Uses Your Smart Phone Compass Against...
06/08/2017, Net Dug Out, Voice hacking can be stopped using smartphone's compass

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06/07/2017, Inverse, Your Phone Compass Can Stop Voice Hacks for This Reason
06/06/2017, Futurity, App could keep hackers from stealing your voice
06/06/2017, Hack Read, New App Will Stop Voice Hacks Using Smartphone Compass
06/06/2017, Phys.org, App uses smartphone compass to stop voice hacking
06/06/2017, Financial Express, Siri, WeChat may put you at voice hacking risk: Study
06/06/2017, Tech Radar, Your smartphone's compass can protect you from voice hacks
06/06/2017, NDTV, Siri, WeChat and Other Apps May Put You at Risk of...
06/05/2017, Science Daily, App uses smartphone compass to stop voice hacking
03/17/2016, Slate, Be Careful. Mistyping a Website URL Could Expose to Malware.
06/22/2014, Deepdotweb, Estimating hidden service traffic from DNS leaks
12/16/2011, msn.com, The Social Cloud: distributed computing services from...
12/15/2011, The Verge, Researchers testing a social-based distributed computing ...
12/15/2011, Data News, Grid computing met je vrienden (Grid computing with...)
12/14/2011, MIT Technology Review, The Imminent Rise of Social Cloud Computing
02/24/2011, Info Packets, Grad Students Theorize on How to Crash the Internet
02/23/2011, Infosec Island, Cyber Weapon Capable of Crashing the Internet?
02/15/2011, Minnesota Daily, U research exposes Web threat,
02/14/2011, Slashdot, How to crash the Internet
02/14/2011, Metro, Cyberweapon capable of wiping out internet developed
02/13/2011, The Register, Boffins devise 'cyberweapon' to take down internet,
02/12/2011, Gizmodo, The Cyberweapon That Could Take Down The Internet
02/12/2011, CBS News, New Cyberweapon Could Take Down the Internet
02/12/2011, Geekosystem, Cyberweapon to Take Down Internet... whenever
02/12/2011, ISSSource, Internet Ripe for Crash
02/11/2011, New Scientist, The cyberweapon that could take down the internet

## 8  Societies and Memberships

ACM (Student member since 2006, member since 2012, senior member since 2018).
IEEE (Student member since 2005, member since 2012, senior member since 2015).
ISOC (Internet Society; member since 2012).

## 9  Misc.

Citizenship: United States