Qussai Yaseen, Ph.D.

Associate Professor

Department of Computer Information Systems
Jordan University of Science and Technology
Irbid, Jordan 22110

Email: qmyaseen@just.edu.jo,
Qussai.Yaseen@gmail.com
Phone: +962 2 720 1000 ext. 22863
Website: www.just.edu.jo/~qmyaseen
Google Scholar Page

Research Interests

I am mainly interested in cybersecurity. I published many papers in this field, and I am a chair/TPC member/ Reviewer in many events, conferences and journals in this field and other information technology fields.

Education

August 2008 – May 2012   **University of Arkansas, Fayetteville, AR, USA (www.uark.edu)**

PhD in Computer Science.

Dissertation Title: Mitigating Insider Threat in Relational Database Systems.
Advisor: Prof. Brajendra Panda (http://csce.uark.edu/689.php)

September 2003 – June 2006   **Jordan University of Science and Technology, Irbid, Jordan**

(www.just.edu.jo).

MSc. in Computer Science.
Thesis Title: A New Approach for Node Splitting in R-tree.
Advisors: Dr. Amer Badarneh and Dr. Ismail Hmeidi.

September 1998 – June 2002   **Yarmouk University, Irbid, Jordan (www.yu.edu.jo)**

BSc. in Computer Science.

Awards, Fellowships and Assistantships

-    Visiting Professor, University of West Attica, Greece, Erasmus+ Program, September 2 – 9, 2018.
-    Visiting Professor, University of Piraeus, Greece, Erasmus+ Program, September 1 -9, 2017.
-    Visiting Researcher, University of Minho, Portugal, ERASMUS MUNDUS program, May 13- June 14, 2017.
-    Graduate Assistantship, University of Arkansas, USA, August 2008 – May 2012.
-    Earl Beling Doctoral Fellowship, College of Engineering, University of Arkansas, 2011.
-    Bachelor Education Fellowship, Yarmouk University, Jordan, 1998-2002.

Funded Projects

-    **PI**. A Fog Computing Based Model for Building a Global IoT Reputation System, Jordan University of Science and Technology, Jordan, Grant Number 112-2019, JD 7500. 2019.

- **Co-PI.** Collusion Attacks in IoT/ Cluster Project. Zayed University, Abu Dhabi, U.A.E . Research Cluster Award # R17079, AED 329200, 2017.

Publications

- **Book Chapter**
1. **Qussai Yaseen,** Insider Threat in Banking Systems. Book: Online Banking Security Measures and Data Protection. In the Advances in Information Security, Privacy, and Ethics (AISPE) Book Series, IGI Publications, USA, 2017.

- **Articles Published in Professional Journals**

2. Q. Althebyan, Y. Jararweh, **Q. Yaseen,** R. Mohawesh. A knowledgebase insider threat mitigation model in the cloud: a proactive approach. *International Journal of Advanced Intelligence Paradigms*. 15(4), 417-436, 2020.

3. **Q. Yaseen**, Y. Jararweh and K. N. Viet. An Evaluation and Analysis of Static and Adaptive Bayesian Spam Filters. *Journal of Internet Technology 19 (4), 1015-1022*, 2018.

4. **Q. Yaseen,** M. Aldwairi, Y. Jararweh, M. Alayoub and Brij Gupta. Collusion attacks mitigation in internet of things: a fog based model. *Journal of Multimedia Tools and Applications*, 77 (14), 18249-18268, Springer, 2018.

5. **Q. Yaseen**, F. Albalas, Y. Jararweh and M. AlAyyoub. Leveraging Fog Computing and Software Defined Systems for Selective Forwarding Attacks Detection in Mobile Wireless Sensor Networks. *Journal of Transactions on Emerging Telecommunications Technologies*, 29 (4), e3183, Wiley, 2018.

6. Y. Jararweh, M. Shehab, **Q. Yaseen** and M. Al-Ayyoub. Improving Classification and Clustering Techniques Using GPUs. *Journal of Concurrency and Computation: Practice and Experience,* 2019.

7. **Q. Yaseen,** Y. Jararweh, B. Panda and Q. Althebyan. An Insider Threat Aware Access Control for Cloud Relational Databases. *Journal of Cluster Computing*, Springer, 2017.

8. Q. Althebyan, O. Alqudah, Y. Jararweh, **Q. Yaseen**. A Scalable Map Reduce Tasks Scheduling: A Threading Based Approach, *International Journal of Computational Science and Engineering*, InderScience, 2017.

9. Q. Althebyan, **Q. Yaseen**, Y. Jararweh, M. AlAyyoub. Cloud Support for Large Scale E-Healthcare Systems. *Journal of Annals of Telecommunications/Special Issue Healthcare on Smart and Mobile Devices*, Springer, 2016.

10. **Q. Yaseen** , Q. Althebyan, B. Panda, Y. Jararweh. Mitigating Insider Threat in Cloud Relational Databases. *Journal of Security and Communication Networks*, Wiley, 2016,

11. Q. Althebyan, Y. Jararweh, **Q. Yaseen**, O. AlQudah, M. AlAyyoub. Evaluating map reduce tasks scheduling algorithms over cloud computing infrastructure, *Journal of Concurrency and Computation: Practice and Experience,* Wiley, 2015.

12. **Q. Yaseen** and I. Hmeidi. Extracting the Roots of Arabic Words without Removing Affixes, *Journal of Information Science*, Sage Publications, vol. 40 no. 3 376-385, 2014.

13. **Q. Yaseen** and B. Panda. Insider Threat Mitigation: Preventing Unauthorized Knowledge Acquisition, *International Journal of Information Security*, Springer, Volume 11, Issue 4, pp 269-280, 2012.

14. A. Badarneh, **Q. Yaseen** and I. Hmeidi. A new enhancement to the R-tree node splitting, *Journal of Information Science*, Sage Publications, Volume 36, Issue 1, pp. 3-18. 2010.

- **Articles Published in Refereed Conferences and Workshop Proceedings**

15. Nour Alqudah and **Q. Yaseen.** Traffic analysis with machine learning: A review. *In Proceedings of the International Workshop of Data Driven Security DDSW2020/3rd International Conference on Emerging Data and Industry 4.0 (EDI40)*, Warsaw, Poland, April 2020.

16. Z. Halloush and **Q. Yaseen**. "A Blockchain Model for Preserving Intellectual Property". *In Proceedings of the International Conference on Data Science, E-learning and Information Systems*, Dubai, UAE, December 2019.

17. **Q. Yaseen**, A. Alabdulrazzaq, F. Albalas. "A Framework for Insider Collusion Threat Prediction and Mitigation in Relational Databases". *In Proceedings of the 9th IEEE Annual Computing and Communication Workshop and Conference (CCWC)*, Las Vegas, USA, January 2019.

18. W. Mardini, M. Al-Soud, **Q. Yaseen**, "A Topology–based Performance Evaluation for an Adaptive Tuning Protocol for Service and Resource Discovery in the Internet of Things". *In Proceedings of the 9th IEEE Annual Computing and Communication Workshop and Conference (CCWC)*, Las Vegas, USA, January 2019.

19. **Q. Yaseen**, M. Aldwairi,"An Enhanced AODV Protocol for Avoiding Black Holes in MANET", EICM 2018, Procedia Computer Science 134, 371-376, 2018.

20. **Q. Yaseen,** Y. Jararweh, M. Alayoub and M. Aldwairi. "Collusion Attacks in Internet of Things: Detection and Mitigation using a Fog Based Model." *In the Proceedings of the 2017 Sensors Applications Symposium (SAS),* New Jersey, USA, March 2017.

21. M. Alayyoub, **Q. Yaseen**, M. Shehab, Y. Jararweh and F. Albalas . "Exploiting GPUs to Accelerate Clustering Algorithms." *In proceedings of the 13th ACS/IEEE International Conference on Computer Systems and Applications AICCSA,* Agadir, Morocco, November 2016.

22. M. Alayyoub, **Q. Yaseen**, M. Shehab, Y. Jararweh and F. Albalas. "Accelerating Clustering Algorithms Using GPUs." T*he 14th IEEE High Performance Extreme Computing Conference (HPEC-2016),* Boston , USA, 2016.

23. M. Alayyoub, **Q. Yaseen**, M. Shehab, F. Albalas and Y. Jararweh. "Accelerating FCM-Based Text Classification Algorithm Using GPUs." *The 14th IEEE High Performance Extreme Computing Conference (HPEC-2016),* Boston , USA, 2016.

24. **Q. Yaseen**, F. Albalas, Y. Jararweh, M. Alayyoub. "A Fog Computing Based System for Selective Forwarding Detection in Mobile Wireless Sensor Networks." *In Proceedings of FAS* Foundations and Applications of Self* Systems Conference*, Augsburg, Germany, September 2016.

25. Q. Althebyan, R. Mohawesh, **Q. Yaseen** and Y. Jararweh. "Mitigating Insider Threats in a Cloud Using a Knowledgebase Approach while Maintaining Data Availability." *In Proceedings of the 10th*

International Conference for Internet Technology and Secured Transactions (ICITST-2015), London, UK, December 2015.

26. B. Panda and **Q. Yaseen,** "Defending Integrity against Insiders in Cloud Relational Databases", *In Proceedings of the 14th Annual Security Conference*, Las Vegas, NV, USA, May 2015.

27. Q. Althebyan, O.Alqudah, Y. Jararweh and **Q. Yaseen**, "Evaluating Map-Reduce Tasks Scheduling Algorithms over Virtualized Infrastructure", *In Proceedings of the 2nd International IBM Cloud Academy Conference (ICA CON 2014)*, Atlanta, GA, USA, May 2014.

28. Q. Althebyan, O. Alqudah, Y. Jararweh and **Q. Yaseen**, "Multi-Threading Based Map Reduce Tasks Scheduling", *In the Proceedings of the 5th International Conference on Information and Communication Systems (ICICS 2014),* Jordan, April 2014.

29. **Q. Yaseen**, Qutaibah Althebyan, and Yaser Jararweh, "PEP-Side Caching: An Insider Threat Port", *In Proceedings of the 14th IEEE Conference on Information Reuse and Integration (IRI2013)*, San Francisco, California, USA, August 2013.

30. **Q. Yaseen** and B. Panda, "Tackling Insider Threat in Cloud Relational Database Systems", *In Proceedings of the 5th IEEE/ACM International Conference on Utility and Cloud Computing*, Chicago, USA, Nov 2012.

31. W. Li, B. Panda and **Q. Yaseen**, " Mitigating Insider Threat on Database Integrity", *In Proceedings of the 8th International Conference on Information Systems Security*, Guwahati, India, Dec 2012.

32. **Q. Yaseen** and B. Panda, "Mitigating Insider Threat without Limiting the Availability in Undeclared Tasks", *In Proceedings of the 6th IEEE Conference on Software Security and Reliability (SERE2012)*, Washington D.C, June 2012.

33. W. Li, B. Panda and **Q. Yaseen**, "Malicious Users' Transactions: Tackling Insider Threat", *In Proceedings of 27th IFIP International Information Security and Privacy Conference (SEC2012)*, Greece, June 2012.

34. **Q. Yaseen** and B. Panda, "Enhanced Insider Threat Detection Model that Increases Data Availability", *In Proceedings of the 7th International Conference of Distributed Computing and Internet Technology*, Bhubaneswar, India, February 2011 (*Acceptance Rate 13%).*

35. **Q. Yaseen** and B. Panda, "Malicious Modification Attacks by Insiders in Relational Databases: Prediction and Prevention", *In Proceedings of the Second IEEE International Conference on Information Privacy, Security, Risk and Trust (PASSAT2010)*, Minneapolis, Minnesota, August 2010. (*Acceptance Rate: 11%)*

36. **Q. Yaseen** and B. Panda, "Organizing Access Privileges: Maximizing the Availability and Mitigating the Threat of Insiders' Knowledgebase", *In Proceedings of the Fourth international Conference on Network and System Security (NSS2010)*, Melbourne, Australia, September 2010.

37. **Q. Yaseen** and B. Panda, "Predicting and Preventing Insider Threat in Relational Databases", *In Proceedings of the 4th Workshop in Information Security Theory and Practice*, Passau, Germany,April 2010.

38. **Q. Yaseen** and B. panda, "Knowledge Acquisition and Insider Threat Prediction in Relational Database Systems*", In Proceedings of the 2009 International Conference on Computational Science and Engineering, Vancouver, Canada, August 2009,* Vancouver, Canada, pp.450-455, August 2009.

39. J. White, B. Panda, **Q. Yaseen**, W. Li and K. Nguyen, "Detecting Malicious Insider Threats using a Null Affinity Temporal Three Dimensional Matrix Relation", *In Proceedings of the 7th International Workshop on Security in Information Systems (WOSIS 2009)*, Milan, Italy, May 2009.

Certificates

- Certified Cisco CCNA Instructor
- Certified Cisco CCNA CyberOps Instructor

Employments

Sept. 2018 – Sep. 2019   **Jordan University of Science and Technology, Jordan (www.just.edu.jo)**
Head of Computer Information Systems Department

Main Accomplishments:
  - Opening Master of Data Science Program.
  - Opening Master of Health Informatics Program.
  - CIS department students ranked #1 in the Graduation Qualifying Exams at the Faculty of Computer and Information Technology (among 5 departments) Organized by the Jordanian Ministry of Higher Education.

Sep. 2017 – Present   **Jordan University of Science and Technology, Jordan (www.just.edu.jo)**
Associate Professor

Taught Courses:
- CIS745 Data Driven Security
- CIS 433 Information Security
- CIS 430 Healthcare Information Security and Privacy
- CIS 442 Computer Networks

Sept. 2014–Sep. 2017   **Jordan University of Science and Technology, Jordan (www.just.edu.jo)**
Assistant Professor

Taught Courses:
- CIS 433 Information Security
- CIS 430 Healthcare Information Security and Privacy
- CS 362 Artificial Intelligence
- CIS 442 Computer Networks

Sept. 2012 – Sep. 2014   **Yarmouk University, Irbid, Jordan (www.yu.edu.jo)**
Assistant Professor

Taught Courses:
- CS492 Computer Security
- CS 376 Artificial Intelligence

- CS 250 Data Structures
- CS 117 Objects Oriented Programming
- CS 101A Programming Foundations

Aug. 2011 – May 2012	**University of Arkansas, Fayetteville, AR, USA (www.uark.edu)** **Teaching Assistant**

My duties were:
- Helping students in labs assignments.
- Preparing labs and assignments.
- Preparing homework.
- Preparing exams and grading.

Aug. 2008 – Aug. 2011	**University of Arkansas, Fayetteville, AR, USA (www.uark.edu)** **Research Assistant, Security/ Database Security** **(http://isr.csce.uark.edu/labnew.html).**

Sept. 2006 – Aug. 2008	**Al Balqaa University, Aqaba, Jordan** (www.bau.edu.jo) **Instructor**.

Taught Courses:
- Data Structures
- Using Information Resources in Management Information Systems
- Databases
- Networks Management
- VBA
- Visual Basic.

Mar. 2003 – Sep. 2006	**Irbid Private University, Irbid, Jordan** (www.inu.edu.jo) **Lab Administrator/ Teaching Assistant.**

My duties were:
- Administrating the operation of computer equipment and acquisition, installation, configuration and maintenance of computer resources for network labs.
- Assisting professors with all duties associated with class preparation, and assisting students in computer labs.
- Providing problem management and coordinating technical support services.
- Helping students in labs assignments for the following programming languages. Visual Basic 6.0, VB. Net, C++, Data Structures.

Professional Presentations

-   Insider Threat in Relational Database Systems: Prediction and Prevention, CSCE Seminar Series at University of Arkansas, October 22, 2010 [http://hthreads.csce.uark.edu/wiki/Seminar].

Organizing Workshops

-   Healthcare Security and Privacy in Jordan, Jordan University of Science and Technology, April 2017. The workshop was organized to compare between the regulations and laws that protect healthcare information privacy and security in Jordanian Hospitals and those used in USA. Representatives from military hospitals, private hospitals and university hospitals attended the workshop and gave presentations. The workshop discussions lead to important suggestions regarding improving the regulations and laws used to protect healthcare information security and privacy in Jordan.

-   Data Science Workshop in conjunction with ICICS 2019, June 12, 2019.

Professional Service

-   **Guest Editor:**
    o   Special Issue on Big Data and Applications in the Cloud, International Journal of Cloud Applications and Computing (IJCAC), Volume 7: 4 Issues (2017): 1.

-   **Chair:**
    o   DDSW2020 – The International Workshop on Data-Driven Security, April 2-6, 2020, Warsaw, Poland.
    o   IoTSMS-2017 - The Fourth International Symposium on Internet of Things: Systems, Management and Security, May 8-11, Valencia, Spain.
    o   IoTSMS-2016 - The Third International Symposium on Internet of Things: Systems, Management and Security, November 2016, Agadir, Morocco.

-   **Publicity Chair:**
    o   ICICS2020, April 2020, Irbid, Jordan.
    o   ICICS2019, June 11-13, 2019, Irbid, Jordan.
    o   ICICS2018, April 3-5, 2018, Irbid, Jordan.
    o   ICICS2017, April 4-6, 2017, Irbid, Jordan.
    o   ICEMIS2017, May 08-10, 2017, Monastir, Tunisia.
    o   FMEC2017, May 8-11, 2017, Valencia, Spain.
    o   FMEC/ISCW2016, September 2016, Augsburg, Germany.
    o   ICEMIS2016, September 2016, Agadir, Morocco.

-   **Track Chair:**
    o   The 16th International Conference on Mobile Systems and Pervasive Computing August 19-21, 2019, Halifax, Canada.
    o   Data Science and Its Applications, ICICS2019, June 11-13, 2019, Irbid, Jordan.
    o   Data Science and Its Applications, ICICS2018, April 3-5, 2018, Irbid, Jordan.
    o   Security, Privacy, and Digital Forensics, ICICS2018, April 3-5, 2017, Irbid, Jordan.
    o   SECURWARE2017, September 10 - 14, 2017, Rome, Italy.
    o   ICICS 2017: Systems and Software Security, April 4-6, 2017, Irbid, Jordan.

-   **Program Committee Member:**

- o ICICS2019   June 11-14, 2019, Irbid, Jordan.
- o SECURWARE2019 October 27- 31, 2019, Nice, France
- o FNC 2018   August 13-15, 2018, Gran Canaria, Spain
- o ICICS2018   April 3-5, 2018, Irbid, Jordan.
- o SECURWARE2018 September 16-20, 2018, Venice, Italy
- o SECURWARE2017 September 10 - 14, 2017, Rome, Italy.
- o FNC-2017   Jul 24-26, 2017, Leuven, Belgium.
- o ICICS2017   April 4-6, 2017, Irbid, Jordan.
- o ANT2016   May 23-26, 2016, Madrid, Spain.
- o ICICS 2015   April 7-9, 2016, Amman, Jordan.
- o ICICS 2014   April 1-3, 2014, Amman, Jordan.
- o IEEE ICCVE 2014   November 3-7, 2014, Vienna, Austria.
- o IEEE ICCVE 2013   December 2-6, 2013, Las Vegas, NV, USA.
- o ICICS 2013   April 23-25, 2013, Irbid, Jordan.

- **Session Chair:**
  - o 9th International Conference on Information and Communication Systems (ICICS2018).
  - o 7th International Conference on Information and Communication Systems (ICICS 2016).
  - o 14th IEEE Conference on Information Reuse and Integration (IEEE IRI2013).

- **Reviewer (selected):**
  - o Journal of Future Generation Computer Systems.
  - o Transactions on Cloud Computing.
  - o Journal of Simulations and Modeling.
  - o International Journal of Cloud Applications and Computing (IJCAC).
  - o International Journal of Big Data Intelligence (IJBDI).
  - o Journal of Distributed and Parallel Databases (DAPD).
  - o Journal of Computer Security, Elsevier (CompuSec).

- **Master Thesis Examiner (selected):**
  1. Mahmoud Aldwairi, "Towards Self-Healing XML documents Against Ransomware", Jordan University of Science and Technology, January 2020.
  2. Tariq Fakhri Alsmadi, "Dynamic Service Broker Routing Policy in Cloud Computing Using Vector Space Model", Yarmouk University, July 2019.
  3. Raeda Freehat, "A Reputation System to Detect DGA-based Botnets using DNS Traffic Mining in Monitored Network", Master thesis, Yarmouk University, 2019.
  4. Mahmoud Abu Naser, "A privacy preserving multi-keyword searching approach in cloud computing for low resources devices", Master thesis, Yarmouk University, April 2018.
  5. Rasha Alhuthaifi, "Improving Antivirus Scanning Engines: Memory on-access scanner", Master Thesis, Jordan University of Science and Technology. December 2016.
  6. Weam Al-Talafhah, "A Resource-Efficient Encryption Algorithm for Multimedia Big Data", November 2016.
  7. Rami Mohawesh, "Mitigating Insider Threat in the Cloud", Master Thesis, Jordan University of Science and Technology. November 22, 2015.
  8. Muna Alshamaileh, "Investigating User Deleted Accounts for Digital Forensics", Master Thesis, Jordan University of Science and Technology. June 30, 2015.
  9. Mosab Alfaqeeh, "Topical Search engine for Cloud Computing Services", Master Thesis, Jordan University of Science and Technology. August 7, 2014.
  10. Omar Al-Qudah, "Multi-Threading Map Reduce Tasks Scheduling", Master Thesis, Jordan University of Science and Technology, January 16, 2014.

11. Fadi Ababneh, "Secure Cloudlet-based Mobile Cloud Computing Model", Master Thesis, Jordan University of Science and Technology, January 2014.
12. Elham Al-Alsharu, "Mobile Based Cloud Computing Modeling", Master Thesis, Jordan University of Science and Technology, July 25, 2013.
13. Ahmad Ali Al-Daoud, "Autonomic Cloud Computing Resources Scaling", Master Thesis, Jordan University of Science and Technology, May 23, 2013.

Committees

1.	Security Operation Center (SOC) officer/JUST University	Sep. 2019 – Present.
2.	Committee Member/Information Security Expert at Accreditation and Quality Assurance Commission for Higher Education Institutions	Aug. 2019– Oct. 2019.
3.	Committee Member/Information Security Expert at Accreditation and Quality Assurance Commission for Higher Education Institutions	Mar 26– June 20, 2019
4.	Curriculum Committee Head, IT college/JUST University	Sep. 2018 – Sep. 2019.
5.	Master of Data Science Curriculum, CIS Dept/JUST University	Sep. 2017 – Sep. 2019.
6.	ABET Readiness Report Committee Head/CIS Dept., JUST University	July 2017– Sep. 2019.
7.	ABET officer/CIS Dept., JUST University.	Jan. 2017 – Present.
8.	Graduates Quality Exams Committee/ CIS Dept., JUST University.	Feb. 2017.
9.	Faculty Council Committee, JUST University.	Sep. 2016 – Sep. 2017
10.	Curriculum Committee/CIS Dept., JUST University.	Sep. 2016 – Present
11.	ABET and QA Committee/ CIS Dept., JUST University.	Sep. 2016 – Present.
12.	Recruiting and Promotion Committee/CIS Dept., JUST University.	Sep. 2015- Sep. 2016.
13.	Faculty Socialization Committee, JUST University.	Sep. 2015 – Sep. 2016.
14.	Strategic Planning Committee/CIS Dept., JUST University.	Oct. 2015 – Sep. 2016.

Master Students

1. Aman AlZoubi, Thesis Title: Collusion Insider Threat: Prediction and Mitigation. April 2017.

References

Available Upon Request.