

Dr. Sufyan Almajali
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Education

Ph.D.	Computer Science	Illinois Institute of Technology, Chicago USA	2006
M.S.	Computer Science	University of Jordan, Amman Jordan	1999
B.S.	Computer Science	University of Jordan, Amman Jordan	1996

Academic Experience

Institution	Title	Dates Held
Princess Sumaya University for Technology, Computer Science department	Dean of King Hussein School of Computing Sciences	10/2017 – 9/2019
Princess Sumaya University for Technology, Software Engineering department	Chair of Software Engineering Department	10/2014- 10/2016
Princess Sumaya University for Technology, Computer Science department / Software Engineering Department	Computer Science - Associate Professor	10/2011 – present Associate starting July 2019
Robert Morris University, CIS department Chicago, USA	Full-time Faculty	12/1999 – 8/2011
Benedictine University, MIS department Chicago, USA	Part-time faculty	2004 – 2005
DeVry University, Chicago, USA	Part-time Faculty	2010-2011
Chicago State University, Chicago, USA	Part-time Faculty	

Industrial Experience

Company	Title	Duties	Dates
Vertex Chicago, IL USA	Director of Technology Solutions	IT Solutions Architect	2019 - Present
Electronic Assessment & Accreditation Chicago, USA & Middle East	Consultant	Senior Software Development	2012-2017
Secure Data Replicator, Chicago, IL USA	Chief Technology Officer	Senior Software Development	12/2007- 9/2011
Cyber Vault Technologies, Savanna/Chicago , IL USA	Senior Network Engineer	Network /System Engineering tasks	5/2006 – 4/2007
Neotick Naperville, IL USA	Senior Network Engineer	Network /System Engineering tasks	2007
Patron Systems- Lucidline, Chicago, IL	Senior Network Engineer	Network /System Engineering tasks	3/2002 – 5/2006
PC Wireless Express Palos Heights, IL USA	Senior Software Developer	Senior Software Development	2002
Computer Center, University of Jordan	Junior Software Developer	Software Development	1999

Honors and awards: Honor Award from Illinois Institute of Technology for finishing Ph.D. with GPA 4.0/4.0

Teaching Areas

Taught at different degree levels PhD, Master, Bachelor and Associate. Courses taught at Robert Morris University, Benedictine university, Devry university, and Princess Sumaya University for Technology, I taught varies technology classes (theoretical and practical) including Security, Networking, Database, Programming, Operating System, and Cisco Systems and Microsoft Certification Courses.

My teaching Experience included:

Programming Area:

Data Structure, Algorithms, C, C++, Mobile Application Development (Native and web based), Visual C++, C#, MFC, Java, Visual Basic, Prolog, Pascal, Lisp, Fortran , Computer Graphics programming, ASP.net , and PHP.

Computer and Network Security Area:

Secure software development, Network Security, Cisco Security, Windows NT/2000/2003/2008/2012 Security, Applied Ethical Hacking, Applied Cyber Security, Linux Security, Cisco PIX, Cisco ASA, and VPN security, Security Risk Analysis.

Networking Area:

Network Security, Local area network 1, Local area network 2, Local area network 3, Wide area network 1, Wide area network 2, Internetworking, Also, practical classes such as CCNA Cisco Classes, Windows NT/2000/2003/XP networks, Novell networks, CCNP. ISDN, Frame Relay, PPP, DSL

Database Area:

Database Theory class, Database Design, Oracle (8, 9, 10, 11 versions), SQL, MS SQL Administration, Database Design, Microsoft Access

Patent:

- Encryption on Computing Device, Inventors Rafiq Kiswani, Sufyan Almajali , Publication date 2015/8/11

Patent office US, Patent number 9104889

<https://www.google.com/patents/US9104889> |

PhD Dissertation for PhD in Computer Science from Illinois Institute of Technology Chicago, IL, USA
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“Aspect oriented software mechanisms for the development of next generation networks”

<https://dl.acm.org/citation.cfm?id=1293063>

Master Thesis for MSc in Computer Science from the University of Jordan, April 1999

“A Model for a Limited Domain of Arabic Speech Recognition Using Artificial Neural Network”,

https://theses.ju.edu.jo/Show_Abstract.aspx?par1=JUF0491358?Page=1

Professional Memberships

- IEEE member
- ACM member

Industrial Certifications

- **CCNP** (Cisco Certified Network Professional 2002) ,
- **CCAI** (Cisco Certified Academy Instructor 2001)
- **CCNA** (Cisco Certified Network Associate 2001) ,
- **CNA** (Certified Novell Administrator 2001)
- **Network+ 2004**

Publications:

2020

- Al-Zewairi, Malek; Almajali, Sufyan; Ayyash, Moussa. 2020. "Unknown Security Attack Detection Using Shallow and Deep ANN Classifiers." *Electronics* 9, no. 12: 2006.
<https://doi.org/10.3390/electronics9122006>
- Hamdan, Salam; Ayyash, Moussa; Almajali, Sufyan. 2020. "Edge-Computing Architectures for Internet of Things Applications: A Survey." *Sensors* 20, no. 22: 6441.
<https://www.mdpi.com/1424-8220/20/22/6441>
- Shaidah Jusoh, Sufyan Almajali, "A systematic Review on Fusion Techniques and Approaches Used in Applications" *IEEE Access Journal*, January 2020, Electronic ISSN: 2169-3536, DOI: 10.1109/ACCESS.2020.2966400 <https://ieeexplore.ieee.org/document/8957578>
- Samar Al-Saqqa, Sufyan Almajali, "Blockchain Technology Consensus Algorithms and Applications: A Survey", *Journal of Interactive Mobile Technologies (ijim)*, Accepted for Publication September 2020, eISSN: 1865-7923 <https://online-journals.org/index.php/i-jim/article/view/15893>
- Monette H. Khadr ; Haythem Bany Salameh ; Moussa Ayyash ; Sufyan Almajali ; Hany Elgala, "Testbed Validation of Security-Aware Channel Assignment in Cognitive Radio IoT Networks", *IEEE 6th World Forum on Internet of Things 2020 (WF-IoT)*, June 2020
<https://ieeexplore.ieee.org/document/9221302>
- Salam Hamdan; Sufyan Almajali ; Moussa Ayyash , "Comparison study between conventional machine learning and distributed multi-task learning models ", *The International Arab Conference on Information Technology (ACIT'2020)*, Egypt , Nov 2020, Accepted

2019

- Sufyan Almajali; Dhiah el Diehn I. Abou-Tair; Haythem Bany Salameh; Moussa Ayyash; Hany Elgala, "A distributed multi-layer MEC-cloud architecture for processing large scale IoT-based multimedia applications", *Multimedia Tools and Applications*. September 2019, Volume 78, Issue 17, pp 24617–24638. First Online: 17 December 2018. <https://doi.org/10.1007/s11042-018-7049-3>
- Sufyan Almajali, Haythem Bany Salameh; Moussa Ayyash; Hany Elgala, "Extending NS3 to Simulate Cognitive Radio Wireless Networks in a Jammed Environment", June 2019, *The 6th International Conference on Software Defined Systems (SDS 2019)*. Rome, Italy. <https://ieeexplore.ieee.org/document/8768657>
- Monette H. Khadr ; Haythem Bany Salameh ; Moussa Ayyash ; Sufyan Almajali ; Hany Elgala, "Securing IoT Delay-Sensitive Communications with Opportunistic Parallel Transmission Capability", *2019 IEEE Global Communications Conference (GLOBECOM)*, Hawaii, United States, December 2019
10.1109/GLOBECOM38437.2019.9013884
<https://ieeexplore.ieee.org/document/9013884>
- Shaidah Jusoh, Sufyan Almajali, Abdelraheem Abualbasal, "A Study Of User Experience For E-Learning Using Interactive Online Technologies", *Journal of Theoretical and Applied Information Technology*, August 2019 <http://www.jatit.org/volumes/Vol97No15/4Vol97No15.pdf>
- Salam Hamdan, Arafat Awajan, Sufyan Almajali, "Compression Techniques Used in IoT: A Comparative Study" *2nd International Conference on new Trends in Computing Sciences (ICTCS)*, Amman, Jordan Oct 2019
DOI: 10.1109/ICTCS.2019.8923112 <https://ieeexplore.ieee.org/document/8923112>

2018

- Haythem Bany Salameh; Sufyan Almajali; Moussa Ayyash; Hany Elgala, "Batch-based security-aware spectrum sharing with simultaneous assignment decisions in time-critical IoT networks with cognitive radio capabilities" *Transactions on Emerging Telecommunications Technologies*, May 2018,
<https://onlinelibrary.wiley.com/doi/abs/10.1002/ett.3317>
- Ayah Atiyah ; Shaidah Jusoh ; Sufyan Almajali, "An Efficient Search for Context-Based Chatbots" *2018 8th International Conference on Computer Science and Information Technology (CSIT)*, July 2018, Amman, Jordan <https://ieeexplore.ieee.org/document/8486187>
- Sufyan Almajali, Haythem Bany Salameh; Moussa Ayyash; Hany Elgala, "A Framework for Efficient and Secured Mobility of IoT Devices in Mobile Edge Computing", April 2018, *The Third IEEE International*

Conference on Fog and Mobile Edge Computing, FMEC 2018, Barcelona, Spain. <https://ieeexplore.ieee.org/document/8364045/>

- Haythem Bany Salameh; Sufyan Almajali; Moussa Ayyash; Hany Elgala, "Securing Delay-sensitive Cognitive Radio IoT Communications under Reactive Jamming Attacks: Spectrum Assignment Perspective" April 2018, The Fifth IEEE International Conference on Software Defined Systems, Barcelona, Spain <https://ieeexplore.ieee.org/document/8370417/>
- Haythem Bany Salameh; Sufyan Almajali; Moussa Ayyash; Hany Elgala, "Spectrum Assignment in Cognitive Radio Networks for Internet-of-Things Delay-sensitive Applications under Jamming Attacks", IEEE Internet of Things Journal, Vol 99. March 2018. <http://ieeexplore.ieee.org/document/8320276/>
- Saleh M. Abu-Soud, Sufyan Almajali, "ILA-3: An Inductive Learning Algorithm with a New Feature Selection Approach", WSEAS Transactions on Systems and Control, Vol 13, 2018. <http://www.wseas.org/multimedia/journals/control/2018/a425903-703.php>
- Ayah Atiyah; Sufyan Almajali, "A Traffic Tracking Algorithm for a Fast Detection of Active Network Sources" The 2nd International Conference on Future Networks and Distributed Systems, June 2018, <https://dl.acm.org/citation.cfm?id=3231069>
- Dana Halabi, Salam Hamdan, Sufyan Almajali, "Enhance the Security in Smart Home Applications based on IOT-CoAP protocol", April 2018, The Sixth International Conference on Digital Information, Networking, and Wireless Communications (DINWC2018), Lebanon <https://ieeexplore.ieee.org/document/8357000/>
- Anas Al-Far ; Abdallah Qusef ; Sufyan Almajali, "Measuring Impact Score on Confidentiality, Integrity, and Availability Using Code Metrics", 2018 International Arab Conference on Information Technology (ACIT), March 2018, Lebanon <https://ieeexplore.ieee.org/document/8672678>

2017

- Mariam Khader; Marwah Alian; Raghda Hraiz; Sufyan Almajali "Simplified AES algorithm for healthcare applications on Internet of Thing" 2017 8th International Conference on Information Technology (ICIT) <http://ieeexplore.ieee.org/document/8080056/>
- Malek Al-Zewairi; Sufyan Almajali; Arafat Awajan, "Experimental Evaluation of a Multi-layer Feed-Forward Artificial Neural Network Classifier for Network Intrusion Detection System" , 2017 International Conference on New Trends in Computing Sciences (ICTCS) <http://ieeexplore.ieee.org/document/8250283>
- Wael Etaiwi; Mariam Biltawi; Sufyan Almajali, "Securing Distributed SDN Controllers against DoS Attacks " ,2017 International Conference on New Trends in Computing Sciences (ICTCS) <http://ieeexplore.ieee.org/document/8250289/>
- Sufyan Almajali; Dhiah el Diehn I. Abou-Tair "Cloud based intelligent extensible shared context services", Second International Conference on Fog and Mobile Edge Computing (FMEC 2017) Valencia, Spain Year: 2017, Pages: 133 - 138, DOI: 10.1109/FMEC.2017.7946420 ,IEEE Conference Publications <http://ieeexplore.ieee.org/document/7946420/>
- Haythem Bany Salameh; Sufyan Almajali; Moussa Ayyash; Hany Elgala, "Security-aware channel assignment in IoT-based cognitive radio networks for time-critical applications", Fourth International Conference on Software Defined Systems (SDS 2017) Valencia, Spain Year: 2017 ,Pages: 43 - 47, DOI: 10.1109/SDS.2017.7939139, IEEE Conference Publications <http://ieeexplore.ieee.org/document/7939139/>
- Malek Al-Zewairi; Dima Suleiman; Sufyan Almajali "An experimental Software Defined Security controller for Software Defined Network" Fourth International Conference on Software Defined Systems (SDS 2017) Valencia, Spain Year: 2017 ,Pages: 43 - 47, DOI: 10.1109/SDS.2017.7939139, IEEE Conference Publications <http://ieeexplore.ieee.org/document/7939137/>

2015

- Yazan A Alqudah, Sufyan Almajali, "On the Utilization of GSM Cell Id for Mobile Device Tracking and Notification", SEMCMI2015, Kuala Lumpur, MY, 2015 <http://sdiwc.net/digital-library/on-the-utilization-of-gsm-cell-id-for-mobile-device-tracking-and-notification.html>

2014

- Rawan Kasasbeh, Sufyan Almajali, Arafat Awajan, Expanding Aspect Oriented Programming toward advanced dynamic network level Aspects in C++, International Journal of Computer Science and Engineering (IJCSE), Vol 3, Issue 1, Jan 2014 ISSN [2278-9960](http://www.ijcse.com)

2013

- Jess Nielsen and Sufyan Almajali, Collecting data from running systems, Journal of Computer Science, 2013, DOI: 10.3844/jcssp.2013.74.82 Volume 9, Issue 1 Pages 74-82.
<http://thescipub.com/abstract/10.3844/jcssp.2013.74.82> New York/USA Based Journal <http://thescipub.com/abstract/10.3844/jcssp.2013.74.82>
- Sufyan Almajali, Dynamic WLAN Services using Aspect Oriented Networking Framework, Proceeding of fourth International Conference on Information and Communication Systems (ICICS 2013), April 2013 Jordan.

2012

- Sufyan Almajali , Computer-based tool for assessing advanced computer programming skills, Proceeding of 2012 International Conference on e-Learning and e-Technologies in Education (ICEEE 2012), IEEE Computer Society Press. Page(s): 114-118 Lodz, Poland. September 2012.
<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6328563>

2006

- Sufyan Almajali, Tzilla Elrad, Wireless Compliant Software Design Model, Proceedings of the Fifth Annual Wireless Telecommunications Symposium (WTS 2006), IEEE Computer Society Press. (California , USA, April 2006) http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4135324
- Sufyan Almajali, Tzilla Elrad, Dynamic Network Policies using Aspect Oriented Network Framework, Proceedings of the IEEE Fifth International Conference on Networking (ICN'06) , IEEE Computer Society Press. (Mauritius , April 2006) http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=1628293
- Sufyan Almajali, Tzilla Elrad, Remote Dynamic Policy Deployment for Sensor Networks using Application Transparent Approach. Proceedings of the 2006 Building Software for Sensor Networks Workshop as part of OOPSLA'06 (Portland, Oregon, USA October 2006). http://www.oopsla.org/2006/submission/workshops/building_software_for_sensor_networks.html
- Sufyan Almajali, Tzilla Elrad, Benefits and Challenges of a Class-Based Design for Dynamic Aspects in DAC++ , Proceedings of the 2006 Software Engineering Properties of Languages and Aspect Technologies Workshop (SPLAT'06) as part of AOSD'06 (Bonn, Germany, March 2006) <http://www.aosd.net/workshops/splat/2006/>
- Sufyan Almajali, Tzilla Elrad, An Open Aspect Oriented Software Design with an Interface to a Third-Party Software, Proceedings of the 2006 Open Aspect Languages Workshop (OAL'06) as part of AOSD'06 (Bonn, Germany, March 2006) <http://www.aosd.net/workshops/oal/2006/>

2005

- Sufyan Almajali, Tzilla Elrad, Coupling Availability and Efficiency for Aspect Oriented Runtime Weaving Systems , Proceedings of the 2005 Dynamic Aspects Workshop (DAW'05) as part of AOSD'05 (Chicago, USA, March 2005) <http://aosd.net/2005/workshops/daw/AlmajaliElrad.pdf>

2004

- Sufyan Almajali, Tzilla Elrad, Dynamic Aspect Oriented C++ for Upgrading Without Restarting , Proceedings of the 2004 International Conference on Advances in Internet Technologies and Applications, with special emphasis on E-Education, E-Enterprise, E-Manufacturing, E-Mobility, and related issues, Purdue University, (Indiana, USA, July 2004), http://www.iit.edu/~almasuf/papers/Almajali_Elrad_caita2004.pdf

- Sufyan Almajali, Tzilla Elrad, A Dynamic Aspect Oriented C++ using MOP with Minimal Hook Weaving Approach, Proceedings of the 2004 Dynamic Aspects Workshop (DAW04) as part of AOSD'04 (Lancaster, UK, March 2004) <http://www.aosd.net/2004/workshops/daw/Proc-2004-Dynamic-Aspects.pdf>

2001

- Sufyan Almajali, Ahmad Sharieh, Muniab Qutiashat ,Arabic Speech Recognition Using SOM-LVA Neural Network, International Conference On Modeling And Simulation, Advances in Modeling & Analysis, (France, 2001) http://www.amse-modeling.org/content_AMSE-2001.htm