Personal Data

Name	Shouki A. Ebad
Department	Computer Science, Faculty of Science @ Northern Border University (NBU)
Nationality	Yemen
Current Rank	"Full" Professor
Official Email	shouki.abbad@nbu.edu.sa
Phone	014-661-5694

Academic Qualifications

Date	Degree	Place of issue	Address
2012	Ph.D.	King Fahd University of Petroleum and Minerals (KFUPM)	Dhahran, Saudi Arabia
2000	M.Sc.	The University of Jordan	Amman, Jordan
1997	B.Sc.	Applied Science University	Amman, Jordan

Professional Record

Job Rank	Place And Address of work	Date
Full Professor	Dept. of Computer Science @ Faculty of Science, NBU	2024 – Now
Associate Professor	Dept. of Computer Science @ Faculty of Science, NBU	2018 – 2024
Assistant Professor	Faculty of Computing & IT, NBU	2012 – 2018
Lecturer-B	College of Computer Science & Engineering, KFUPM	2006 – 2012
Lecturer	College of Computer Sciences & IT, King Faisal University	2000 - 2006

Management Position

Administrative Position	Place	Date
Unit of Graduate Studies & Scientific Research, Member	Faculty of Science, NBU	2022 - Now
Unit of Graduate Studies & Scientific Research, Head	Faculty of Science, NBU	2021- 2022
University Council Membership	Scientific Council, NBU	2020-2024
Secretary General of the Scientific Council	NBU	2018 - 2020
Assistant Dean for Technical Affairs	Deanship of IT, NBU	2014 – 2017
Head of Dept.	Dept. of Info. Systems @ Faculty of Computing & IT, NBU	2012- 2014
Vice Dean	Faculty of Computing & IT, NBU	2012 - 2013

Research Achievements (Published research papers)

No	Name of Investigators	Research Title	Publisher and Date of Application
1	Amal K. Alkhalifa, Muhammad Kashif Saeed, Kamal M. Othman, **Shouki A. Ebad**, Mohammed Alonazi, Abdullah Mohamed	Prairie dog optimization algorithm with deep learning assisted based aerial image classification on UAV imagery	Heliyon, 10 (18), e37446, 2024
2	Sana Alazwari, Mashael Maashi, Jamal Alsamri, Mohammad Alamgeer, **Shouki A. Ebad**, Saud S. Alotaibi, Marwa Obayya, and Samah Al Zanin	Improving laryngeal cancer detection using chaotic metaheuristics integration with squeeze-and-excitation resnet model	Health Information Science and Systems, 12, 38, 2024

3	**Shouki A. Ebad** and Abdulbasit A. Darem	Exploring Android obfuscators and deobfuscators: an empirical investigation	Electronics 2024, 13 (12), 2272
4	Abdulbasit A. Darem, Asma A. Alhashmi, Tareq M. Alkhaldi, Abdullah M. Alashjaee, Sultan M. Alanazi, and **Shouki A. Ebad**	Cyber threats classifications and countermeasures in banking and financial sector	IEEE Access, vol. 11, pp. 125138 – 125158, 2023
5	Asma A. Alhashmi, Abdulbasit A. Darem, Sultan M. Alanazi, Abdullah M. Alashjaee, Bader Aldughayfiq, Fuad A. Ghaleb, **Shouki A. Ebad**, and Majed A. Alanazi	Hybrid malware variant detection model with extreme gradient boosting and artificial neural network classifiers	Computers, Materials, & Continue, 2023, 76(3), pp. 3483-3498
6	**Shouki A. Ebad**	Quantifying IoT security parameters: an assessment framework	IEEE Access, vol. 11, pp. 101087-101097, 2023
7	Asma A. Alhashmi, Abdulbasit A. Darem, Abdullah M. Alashjaee, Sultan M. Alanazi, Tareq M. Alkhaldi, **Shouki A. Ebad**, Fuad A. Ghaleb, and Aloyoun M. Almadani	Similarity-based hybrid malware detection model using API calls	Mathematics, 2023, 11, 2944
8	**Shouki A. Ebad**	Investigating the input validation vulnerabilities in C programs	International Journal of Advanced Computer Science and Applications(IJACSA), 14(1), 2023
9	**Shouki A. Ebad**	Exploring how to apply secure software design principles	IEEE Access, vol. 10, pp. 128983-128993, 2022

المملكة العربية السعودية
وزارة التعليم
جامعة الحدود الشمالية

جامعة الحدود الشمالية
NORTHERN BORDER UNIVERSITY
2007 - ١٤٢٨

10	**Shouki A. Ebad**	What topics should or should not be included in software security education-qualitative content analysis	Computer Applications in Engineering Education, 30(6), pp. 1753-1773, 2022
11	Asma A. Al-Hashmi, Fuad A. Ghaleb, A. Al-Marghilani, Abdulsamad E. Yahya, **Shouki A. Ebad**, Muhammad Saqib M.S., Abdulbasit A. Darem	Deep-ensemble and multifaceted behavioral malware variant detection model	IEEE Access, vol. 10, pp. 42762-42777, 2022
12	**Shouki A. Ebad**	An exploratory study of why UMLsec is not adopted	Proceedings of the 8th International Conference on Information Systems Security and Privacy (ICISSP 2022), February 9 - 11, 2022, pages 357-364, Sponsored by INSTICC - Institute for Systems and Technologies of Information, Control and Communication, Portugal
13	**Shouki A. Ebad**	Lessons learned from offline assessment of security-critical systems: the case of microsoft's active directory	International Journal of System Assurance Engineering and Management, 13, 535–545, 2022
14	**Shouki A. Ebad**, A. A. Darem and J. H. Abawajy	Measuring software obfuscation quality– a systematic literature review	IEEE Access, vol. 9, pp. 99024-99038, 2021
15	**Shouki A. Ebad**	Security assessment of large-scale IT infrastructure	The Scientific Journal of King Faisal University: Basic and Applied Sciences
16	Sultan T. Alanazi, Mohammed Anbar, **Shouki**	Theory-based model and prediction	Symmetry, 2020, 12(9), 1544

	A. Ebad, Shankar Karuppayah and Hadeer A. Al-Ani	analysis of information security compliance behavior in the Saudi healthcare sector	
17	**Shouki A. Ebad**	Healthcare software design and implementation—A project failure case	Journal of Software: Practice and Experience, 50(7), 1258–1276, 2020
18	Abdullah A. Alyousef and **Shouki A. Ebad**	Adherence to the Arabic rules of grammar on twitter: case study in the sector of Saudi institutions	King Khalid University Journal for Humanities, 28(2), 43-63, 2019
19	**Shouki A. Ebad** and Moataz Ahmed	Investigating the effect of software packaging on modular structure stability	Computer Systems Science & Engineering, 34(5), Sep, 2019
20	**Shouki A. Ebad** and Moataz Ahmed	A comparison of functionality-based packaging using GA and adaptive KNN clustering as two approaches to package software	International Journal of Advanced Trends in Computer Science and Engineering, 8(1.4), 428-433, 2019
21	**Shouki A. Ebad**	An exploratory study of ICT projects failure in emerging markets	Journal of Global Information Technology Management, 21(2), 139-160, 2018
22	**Shouki A. Ebad**	The Influencing causes of software unavailability—a case study from industry	Journal of Software: Practice and Experience, 48(5), 1056-1076, 2018

23	**Shouki A. Ebad**	Regulatory rules for security requirements of financial information systems: attempt to formalize	European Journal of Security Research, 2(2), 97-117,2017
24	**Shouki A. Ebad**	Inspection reading techniques applied to software artifacts – a systematic review	Computer Systems Science & Engineering, 32(3) (May, 2017)
25	**Shouki A. Ebad**	Towards measuring software requirements volatility: a retrospective analysis	Malaysian Journal of Computer Science, Vol. 30(2), 99-116 (2017)
26	**Shouki A. Ebad** and Danish Manzoor	An empirical comparison of Java and C# programs in following naming conventions	International Journal of People-Oriented Programming, 5(1), 39-60 (2016)
27	**Shouki A. Ebad** and Moataz A. Ahmed	Influencing factors for IT software project failures in developing countries— a critical literature survey	Journal of Software, 11(11), 1145-1153 (2016)
28	**Shouki A. Ebad** and Moataz A. Ahmed	Review and evaluation of cohesion and coupling metrics at package and subsystem level	Journal of Software, 11(6), 598-605 (2016)
29	**Shouki A. Ebad**, Emad S. Jaha, and Mohammed Al-Qadhi	Analyzing privacy requirements: a case study of	Informatics for Health and Social Care, 41(1), 47-63 (2016)

		healthcare in Saudi Arabia	
30	**Shouki A. Ebad** and Moataz A. Ahmed	Measuring stability of object-oriented software architectures	IET Software, 9 (3): 76-82 (2015)
31	**Shouki A. Ebad** and Moataz A. Ahmed	Functionality-based software packaging using sequence diagrams	Software Quality Journal, 23 (3): 453-481 (2015)
32	**Shouki A. Ebad**	A comparative study of query-set size and fixed-data perturbation as two techniques to secure statistical databases	International Journal of Computer Applications, 68 (4): 7-10 (2013)
33	**Shouki A. Ebad** and Moataz A. Ahmed	XMI2UC: An automatic tool to extract use cases from object-oriented source code	International Journal of Future Computer and Communication (IJFCC), 1(2): 193-195 (2012)
34	**Shouki A. Ebad**	The support of Islamic sites on the internet to the living languages (in Arabic)	Conf. of Arabic Content on the Internet, Imam Mohammad ibn Saud Islamic University, Riyadh, Saudi Arabia, Oct 2011
35	**Shouki A. Ebad** and Moataz Ahmed	An evaluation framework for package-level cohesion metrics	The 2nd Int'l Conf. on Future Information Technology. Singapore, IPCSIT Press Vol. 13, 326-330, Sep 16-18, 2011
36	**Shouki A. Ebad** and Moataz Ahmed	Software packaging approaches – a comparison framework	Proceedings of the 5th European Conf. on Software Architecture, Lecture Notes in Computer Science 6903, 438-446, Essen, Germany, Sep 13-16, 2011
37	**Shouki A. Ebad**	An empirical comparison of open source Java and	Int'l Conf. on Information and Communication Systems (ICICS

		C++ programs in following coding standards	2009), Amman, Jordan, Dec 2009
38	**Shouki A. Ebad**	The size of research centers in Australian universities and Saudi universities: a descriptive study (in Arabic)	The 2nd Conf. on Planning & Development of Education & Scientific Research in the Arab States, King Fahd University of Petroleum & Minerals, Saudi Arabia, Feb 2008
39	**Shouki A. Ebad**	The Islamic sites on the Internet: advantages and disadvantages (in Arabic)	The 17th National Computer Conf. (NCC 17), Al-Madinah, Saudi Arabia, Apr 2004

Research Achievements (Finished Research Projects)

Investigator	Research Title (Funder)	Date
Principle Investigator	Exploring Android Obfuscators and Deobfuscators: An Empirical Investigation	2024
Principle Investigator	Quantifying IoT Security Parameters- An Assessment Framework (Deanship of Scientific Research at NBU)	2023
Principle Investigator	What Topics Should or Should Not Be Included in Software Security Education—Qualitative Content Analysis (Deputyship for Research and Innovation, Ministry of Education in Saudi Arabia)	2021
Team Member	Obfuscation-resilient Algorithm for Accurate and Early Detection and Prevention of Emerging Time Variant Malicious Software (Ministry of Education, Saudi Arabia)	2020
Principle Investigator	Evaluation of IT Infrastructure Security (Deanship of Scientific Research at NBU)	2020
Co-Investigator	Adherence to The Arabic Grammar on the Social Media: The Case of Establishments in Saudi Arabia (In Arabic), (Deanship of Scientific Research at NBU)	2018
Principle Investigator	Failure of Healthcare Software Implementation (Deanship of Scientific Research at NBU)	2018

Principle Investigator	The Causes of Software Unavailability, (Deanship of Scientific Research at NBU)	2017

Membership, Committees, Talks, and Industrial Experience

#	
1	(Committee Member) A Committee to automate the scientific promotions (Implementation of Initiative 1-4-1-5 form the NBU Strategic Plan 2020-2025) (University level, 2021-2023)
2	(Committee Member) Permanent committee for scientific promotions (University level, 2020-2023)
3	(Committee Member) A committee to study the low turnout of students to the Master's program in Physics (University level, 2022)
4	(Committee Member) A committee to review the executive regulations of the academic promotion (University level, 2020-2021)
5	(Committee Member) A sub-committee to improve the quality of research in humanitarian & social studies (University level, 2021)
6	(Committee Head) Technical Committee at IT Deanship (University level, 2016-2017)
7	(Committee Member) RFPs evaluation for the 'Datacenter expansion –Phase 2' project (University level, 2015-2017)
8	(Committee Member) A committee to establish new academic programs in Computer Science, BS and Diploma (College level, 2022)
9	(Committee Member) A joint committee of to establish joint post-graduate programs between Faculty of Science and Faculty of Computing & IT at NBU (College level, 2022)
10	(Committee Member) Graduate studies committee (College level, 2022)
11	(Committee Member) A committee for reviewing the portfolio of a Business scholarship student (College level, 2022)
12	(Committee Member) Laboratories (College level, 2017-2018)
13	(Committee Head) Public relations (Dept. level, 2023-2024)
14	(Committee Head) Graduate studies (Dept. level, 2022-Now)
15	(Committee Member) Curricula development committee (Dept. level, , 2020-Now)
16	(Committee Head) Graduation projects (Dept. level, 2021-2022)
17	Reviewer for high-quality journals. Available at: https://www.webofscience.com/wos/author/record/18439

18	(Member) Editorial Board of Information Engineering and Applied Computing Journal https://ojs.whioce.com/index.php/ieac/about/editorialTeam
19	Surveyor with ICT Market Study Project by CITC[1] & KFUPM (2017, 2018, 2019)
20	(Member) Technical Program Committee The 2nd Int'l Workshop on the Future of Internet of Things (FOIOT 2015) held with the 10th Int'l Conf. on Future Networks and Communications, August 17-20, 2015, Belfort, France
21	(Member) Technical Program Committee The 3rd Int'l Workshop on the Future of Internet of Things (FOIOT 2016) held with the 11th Int'l Conf. on Future Networks and Communications, August 15-18, 2016, Montreal, Quebec, Canada
22	(Member) Technical Program Committee The 4th Int'l Workshop on the Future of Internet of Things (FIT 2018) held with the 15th Int'l Conf. on Mobile Systems and Pervasive Computing, August 15, 2018, Gran Canaria, Spain
23	(Workshop) How to prepare the scientific promotion portfolio (Part: Publications) For NBU Faculty organized by Deanship of Academic Development (2022)
24	(Workshop) How to prepare the scientific promotion portfolio (Part: University and community service) For NBU Faculty organized by Deanship of Academic Development (2021)
25	(Talk) How does IT improve the administrative work? For NBU Employees organized by Deanship of Academic Development, NBU (2018)
26	(Talk) Using advanced IT to increase performance. For Class of the MGT501 course (Principles of Management) at KFUPM (2010)

Teaching Activities (Undergraduate level)

Course Name	Course Number	Place
Software Engineering	CS 443	Faculty of Science, NBU
Human-Computer Interaction	CS 488	
Analysis & Design Algorithms	CS 314	
Graduation Project	CS 492	
Introduction to Computing (Lab)	CS 211	
Computer Programs Design	CS 456	
Research Circle/ندوة بحث	CS 491	

---

[1] Communication and Information Technology Commission http://www.citc.gov.sa/en/Pages/default.aspx

Advanced Programming	CPIT 395	Faculty of Computing and IT, NBU
Human-Computer Interaction	CPIT 280	
IS Strategies & Policies	CPIS 434	
IS Applications Design & Development	CPIS 352	
Software Quality & Testing	CPIS 357	
Software Design Patterns	CPIT 252	
Graduation Project I	CPIT 498	
Network Administration	CPIT 475	
Object Oriented Programming	EE 202	Faculty of Engineering, NBU
Introduction to Computing I (Lab)	ICS 102	College of Computer Science & Engineering, KFUPM
Computer programming in C (Lab)	ICS 103	
– Introduction to Computer – C Programming Language – Algorithms and Problem Solving – Management Information Systems – Office Automation Systems – Java Programming Language – Selected Topics in Computing – Fundamentals of Programming and Data Structure – Graduation Projects		College of Computer Sciences & IT, King Faisal University

Teaching Activities (Supervision on Theses)

Degree	University	Title	Date
Ph.D.	Univirsiti Sains Malaysia (Field Supervisor)	The Assessment of the Infrastructure Readiness for the Anti-Cybercrime Wave in the Kingdom of Saudi Arabia	2019-2022

Community Service

Place	Position	Form	To
The Chamber of Commerce & Industry of the Northern Border Province	Scientific Consultant for the Diploma Programs in Computing	2015	2021
Al-Gurayat Chamber of Commerce & Industry, Al-Gurayat governorate	Scientific Consultant for the Diploma Programs in Computing	2016	2021
(Lecture) The Arabic language at the social media era (in Arabic). Available at: https://www.youtube.com/watch?v=NhRBJhRxQXg	The Northern Border Literary Cultural Club	2017	-