

<b>Name</b>	<b>Naya Nagy</b>		
<b>Academic Rank</b>	<b>Assistant Professor</b>	<b>Status</b>	<b>Active – Full time</b>

<b>Degree</b>	<b>Field</b>	<b>Institution</b>	<b>Year</b>
PhD	Computer Science	Queen's University, Canada	2010
	Thesis: Applications of Quantum Cryptography		
MSc	Computer Science	Queen's University, Canada	2001
	Thesis: The Maximum Flow Problem: A Real-Time Approach		
BSc	Computer Science	Technical Univ. of Cluj, Romania	1993
	Project: Execution tree for a PARLOG interpreter.		

<b>Other related experience – teaching, industrial, etc.</b>	
2014-present	Imam Abdulrahman Bin Faisal University, KSA, Assistant Professor - Acted in the Computer Science Department and in the Cyber Security Department.
2010-2014	Prince Mohammad Bin Fahd University, KSA, Assistant Professor - Acted in the Computer Science Department and occasionally in the IT Department.
2004-2010	Queen's University, Canada, Teaching and Research Assistant
2001-2003	Molecular Mining Inc., Kingston, Canada, Software Developer
1997-1999	Institute of Isotope and Molecular Technology, Romania, Research Assistant

<b>Principal publications</b>	
1.	Marius Nagy, <b>Naya Nagy</b> , “Coding in the entanglement domain”, Quantum Information Processing, vol. 19, issue: 4 , Article Number: 134 Published: MAR 12 2020, <a href="https://doi.org/10.1007/s11128-020-02632-6">https://doi.org/10.1007/s11128-020-02632-6</a> , <b>Impact Factor: 2.2.</b>
2.	Dhoha A. Almubayedh, Ghadeer Alazman, Mashael Alkhalis, Manal Alabdali, <b>Naya Nagy</b> , Marius Nagy, Ahmet Emin Tatar, Malak Alfosail, Atta Rahman, Norah AlMubairik, “Quantum bit commitment on IBM QX”, Quantum Information Processing, vol. 19, issue: 2, Article Number: 55, Published: FEB 2020, <a href="https://doi.org/10.1007/s11128-019-2543-8">https://doi.org/10.1007/s11128-019-2543-8</a> , <b>Impact Factor: 2.2.</b>
3.	Mariam A. Elhusein, Dilek Düşteğör, <b>Naya Nagy</b> , and Amani K. Hamdan Alghamdi, “The Impact of Digital Technology on Female Students’ Learning Experience in Partition-Rooms: Conditioned by Social Context”, IEEE Transactions on Education, issue: 99, pages 1-9, 11 June 2018, <b>DOI: 10.1109/TE.2018.2840501</b> , <b>Impact Factor: 1.6.</b>
4.	Dilek Düşteğör, Mariam A. Elhusein, Amani Alghamdi, and <b>Naya Nagy</b> , “Learning behind glass walls: learning style and partition-room, is there a correlation?”, International Journal of Innovation Science, accepted 25 February 2018, <b>DOI: 10.1108/IJIS-09-2017-0100.</b>
5.	Marius Nagy, and <b>Naya Nagy</b> , “An Information-Theoretic Perspective on the Quantum Bit Commitment Impossibility Theorem”, Entropy, (2018), 20, 193; DOI:10.3390/e20030193 .
6.	<b>Naya Nagy</b> , Marius Nagy and Selim G. Akl. “A Less Known Side of Quantum Cryptography” in Andrew Adamatzky (Ed.) “Emergent Computation” Springer, (2017), pages 121-170.
7.	Marius Nagy and <b>Naya Nagy</b> (2016) “Quantum Oblivious Transfer: a secure practical implementation”. Quantum Information Processing. 15(12):5037-5050. DOI: 10.1007/s11128-016-1438-1.
8.	<b>Naya Nagy</b> and Marius Nagy. (2016) “Quantum Bit Commitment Within an Equivalence Class". International Journal of Unconventional Computing. 12(5-6):413-432.
9.	<b>Naya Nagy</b> , Marius Nagy and Paul Hodor. (2016) “Cryptography and Information Protection in the Living World". International Journal of Unconventional Computing. 12(2-3):133-143.
10.	Marius Nagy and <b>Naya Nagy</b> , “Quantum-based secure communications with no prior key distribution”, Soft Computing, January 2016, 20,:(87-101) (DOI 10.1007/s00500-014-1555-7)
11.	Hafsa Yazdani, Fatemah Al Zayer, <b>Naya Nagy</b> and Marius Nagy, “Turing Machine Simulations: Classic and Quantum”, International Journal of Computer and Electrical Engineering, 2014, 6(1):49-53.
12.	Marius Nagy and <b>Naya Nagy</b> , “Quantum Tic-Tac-Toe: A Genuine Probabilistic Approach”, Applied Mathematics (Special Issue - Computing), 2012, 3(11A):1779-1786.
13.	<b>Naya Nagy</b> and Selim G. Akl, “Computing with uncertainty and its implications to universality”, International Journal of Parallel, Emergent and Distributed Systems, April 2012, 27(2):169-192.
14.	<b>Naya Nagy</b> , Marius Nagy and Selim G. Akl. "Hypercomputation in a cryptographic setting: Solving the identity theft problem using quantum memories". International Journal of Unconventional Computing, Vol. 6, No. 5, 2010, pp. 375 - 398.
15.	<b>Nagy, N.</b> , Nagy, M., and Akl, S.G., “Quantum security in wireless sensor networks", Natural Computing, Vol. 9, No. 4, December 2010, pp. 819 - 830.

16.	<b>Nagy, N.</b> , Nagy, M. and Akl, S.G., "Key distribution versus key enhancement in quantum cryptography", <i>Parallel Processing Letters, Special Issue on Advances in Quantum Computation</i> , Qiu, K., Ed., Vol. 20, No. 3, September 2010, pp. 239 - 250.
17.	<b>Nagy, N.</b> and Akl, S.G., "A quantum cryptographic solution to the problem of access control in a hierarchy", <i>Parallel Processing Letters, Special Issue on Advances in Quantum Computation</i> , Qiu, K., Ed., Vol. 20, No. 3, September 2010, pp. 251 - 261.
18.	<b>Nagy, N.</b> and Akl, S.G., "One-time pads without prior encounter", <i>Parallel Processing Letters, Special Issue on Advances in Quantum Computation</i> , Qiu, K., Ed., Vol. 20, No. 3, September 2010, pp. 263 - 273.
19.	Cameron McKay, Joslynn Afleck, Naya Nagy, Selim G. Akl and Virginia K. Walker, "Molecular codebreaking and double encoding - Laboratory experiments", <i>International Journal of Unconventional Computing</i> , Vol. 5, No. 6, 2009, pp. 547 - 564.
20.	Naya Nagy and Selim G. Akl, "Authenticated quantum key distribution without classical communication", <i>Parallel Processing Letters, Special Issue on Unconventional Computational Problems</i> , Vol. 17, No. 3, September 2007, pp. 323 - 335.
21.	Naya Nagy and Selim G. Akl, "Aspects of biomolecular computing", <i>Parallel Processing Letters</i> , Vol. 17, No. 2, June 2007, pp. 185 - 211.
22.	Naya Nagy and Selim G. Akl, "The maximum flow problem: A real-time approach", <i>Parallel Computing</i> , Vol. 29, No. 6, 2003, pp. 767 - 794.

Conferences – Last 3 Years Only
<b>Naya Nagy</b> and Marius Nagy, “An Information-Theoretic Perspective on the Quantum Bit Commitment Impossibility Theorem”, 3-rd International Conference on Quantum Optics and Quantum Computing”, September 10-11, 2018 in London, UK.
Afnan Binduf, Hanan Othman Alamoudi, Hanan Balahmar, Shatha Alshamrani, Haifa Al-Omar, <b>Naya Nagy</b> , Active Directory and Related Aspects of Security, 21-st Saudi Computer Society National Computer Conference NCC’2018, IEEE Saudi Section, 25-26 April 2018, Riyadh, KSA.
Lamyaa Sami Alsaleem, Malak Fahad Aldakheel, Deema Abdullah Alotaibi, Sarah Ali Alqahtani, Sara Fawaz Alharbi, <b>Naya Nagy</b> , Policy, Legal, Legislation and Compliance: Saudi Personnel Compliance and Adaption to Recent Security Measures, 21-st Saudi Computer Society National Computer Conference NCC’2018, IEEE Saudi Section, 25-26 April 2018, Riyadh, KSA.
Asayel AlAbdullatif, AlHanoof AlHarbi, Kholood AlAjaji, Fatima AlAmoudi, Razan AlBrahim, <b>Naya Nagy</b> , Policy, Legal, Legislation & Compliance: Risks that are caused by the absence of policies, 21-st Saudi Computer Society National Computer Conference NCC’2018, IEEE Saudi Section, 25-26 April 2018, Riyadh, KSA.
Dhoha Almubayedh, Mashaal Al khalis, Ghadeer Alazman, Manal Alabdali, Rouqaiah Al-Refai, <b>Naya Nagy</b> , Security Related Issues In Saudi Arabia Small Organizations: A Saudi Case Study, 21-st Saudi Computer Society National Computer Conference NCC’2018, IEEE Saudi Section, 25-26 April 2018, Riyadh, KSA.
Norah Saad Al-Serhani, Cady Abdulelah Alnafea, Fatima Fathallah Al-yousif, Maisaa Mohammad Al-ghuwainim, Sakinah Rashed AlShaer, <b>Naya Nagy</b> , Vulnerabilities and Exploitation of Universities’ Registration Tools, 21-st Saudi Computer Society National Computer Conference NCC’2018, IEEE Saudi Section, 25-26 April 2018, Riyadh, KSA.
Ahmet Emin Tatar, Marius Nagy, and <b>Naya Nagy</b> , “The Cost of Breaking a Quantum Bit Commitment Protocol on Equivalence Classes”, SECRIPT 2016, 13-th International conference on Security and Cryptography, July 2016.
Alla Altalib, Yomna Al-Ibrahim, Zahra Almahfoudh, Marius Nagy, <b>Naya Nagy</b> , “Security Measures in a Keyless Quantum Communication Protocol”, 2015 Fifth International Conference on e-Learning, Manama Bahrain, pages 53-57, October 2015, 978-1-4673-9431-4/15 \$31.00 © 2015 IEEE, DOI 10.1109/ECONF.2015.33
<b>Naya Nagy</b> , Marius Nagy, Selim G. Akl, “Communicating Secret Information without Secret Messages in Wireless Sensor Networks”, 2015 Fifth International Conference on e-Learning, Manama Bahrain, October 2015, pages 29-34, 978-1-4673-9431-4/15 \$31.00 © 2015 IEEE, DOI 10.1109/ECONF.2015.32

<b>Selected Courses that I taught</b>			
	<b>Name</b>	<b>Program-Major, Level and Year of Teaching</b>	<b>Brief Selection of Topics</b>
1.	Advanced Algorithm Analysis and Design	<i>Computer Science, Master Level – 2018 (now)</i>	Dynamic Programming. Advanced Tree and Graph Algorithms. Introduction to Computational Geometry. NP Completeness.
2.	Secure Software Design and Engineering	<i>Cyber Security, Senior Level – 2018 (now)</i>	Secure Software Development Process, 3-tier Practical Implementations with Attacks/Defense Testing.
3.	Basic Language Translator, Compiler	<i>Computer Science, Senior Level (Elective) – 2017/2018</i>	Lexical and Syntax Analysis. Syntax Directed Compiler. Practical Implementations in ANTLR4.
4.	Advanced Programming Language	<i>Computer Science, Senior Level (Elective) – 2016/2017</i>	Syntax and Semantics. Imperative and Object Oriented Programming Paradigms. Functional Programming (LISP). Logic Programming (PROLOG).
5.	Mobile Application Programming	<i>Computer Science, Senior Level (Elective) – 2016/2017</i>	Android Architecture Stack. Activities, Fragments. SQLite. Intents, Broadcast Receivers. Maps. Threads. Introduction to Swift.
6.	E-Commerce	<i>Information Technology, Senior Level – 2013/2014,2012/2013</i>	3-tier Architecture. Java Web Technology: Servlets, JSP pages. Tomcat Webserver with Oracle Connection.
7.	Human Computer Interaction	<i>Computer Science, Senior Level – 2013/2014,2012/2013</i>	User Friendly Interface Design. Practical Implementations in Android.
8.	Digital Evidence Analysis	<i>Cyber Security, Junior Level – 2017/2018 and 2016/2017</i>	Data Sources. Visually Representing Data. From Data to Graphs. Visual Security Analysis.
9.	Information System Audit	<i>Cyber Security, Junior Level – 2017/2018</i>	The Process of Auditing Information Systems. Governance and Management of IT. Information Systems Acquisition, Development and Implementation. Information Systems Operation, Maintenance, and Support. Protection of Information Assets.
10.	Algorithm Analysis and Design	<i>Computer Science, Junior Level – 2016/2017, 2015/2016</i>	Sorting Algorithms. Asymptotic Analysis. Divide-and Conquer. Dinamic Programming. Greedy Algorithms. Graph Algorithms.

11.	Web-Based Systems	<i>Computer Science and Computer Information Systems, Junior Level – 2015/2016</i>	HTML5, Cascading Style Sheets, PHP, JavaScript, XML, AJAX.
12.	Logic an Proof Techniques	<i>Computer Science, Junior Level – 2014/2015</i>	Sets. Logic. Direct Proof and Proof by Contrapositive. Proof by Contradiction. Mathematical Induction. Equivalence Relations. Functions.
13.	Discrete Mathematics	<i>All majors, Sophomore Level – 2018 (now) and 2017/2018</i>	Logic, Functions, Number Theory, Induction, Counting, Relations, Graphs, Trees.
14.	Computer Science II	<i>All majors, Sophomore Level – 2010/2011</i>	Object Oriented Programming in C++.
15.	Computer Science I	<i>All majors, Sophomore Level – 2010/2011-20120/2013</i>	Imperative Programming in C++. Variable Types. Branching. Loops. Functions. Pass by Value and Reference.

<b>Student Project Supervision</b>	
MSc. Project 2018-present	Hadeel N Alomair, “Resource optimization with Task Scheduling in cloud computing, a Simulation”
BSc. Project With <b>Aramco</b> 2018-present	Hind Ehab Hamdy, Noor Satea Ghazal, Mona Abdulaziz Alharbi, Rayanah Almulhim, with Dr. Razen AlHarbi (Aramco) “Dynamic and interactive graphical representation of oil well organizational hierarchy”
BSc. Project 2018-present	Dhoha ALmubayedh, Ghadeer ALazman, Manal Alabdali, Mashael Alkhalis, “ <b>Quantum Security</b> Bit Commitment Protocol Implementation on IBM QX”
BSc. Project 2017	Batool M. Al-Saeedi, Ghadeer A. Al-Jishi, Sumat A. Al-Makhamil, Fatimah A. Al-Theeb, Fatimah M. Al-Obaidan, “Smart Massage Device”, <b>Arduino</b> Prototype.
BSc. Project 2016	Fatima Sameer Al-Nashmi, Zainab Mohammed Abu Abdullah, Sukinah Abdulhakeem Al-Qudihi and Dalal Ali Ahmad Alkhalaf, “Security Schemes on Mobile Devices”, 2016.
BSc. Project 2015	Amal Al-Mansour, Eman Al-Harbi, Hessa Talal and Haya Bubshait, “Oilspot Mobile Application”, 2015.
BSc. Project 2013	Eman Al Sukairi, Nada Daghistani and Sara Al Bassam, “Group Comparison of Bacterial Genomes”, 2013.
BSc. Project 2012	<ul style="list-style-type: none"> <li>• Hafsa Yazdani and Fatemah Al Zayer, “Turing Machine Simulator”, 2012.</li> </ul>
BSc. Project 2011	<ul style="list-style-type: none"> <li>• Maryam Al Dhamen and Yasmeen Abussaud, “Quantum Game Company with Marketing Research”, 2011..</li> </ul>

<b>Most Important Institutional/Administrative Service</b>	
2011-2014	<p><b>Female Coordinator of the College of Computer Engineering and Science,</b> Prince Mohammad Bin Fahd University. My duties included</p> <ul style="list-style-type: none"> <li>- Managing event and committee activities.</li> <li>- Participating in some academic and hiring/interview decisions.</li> <li>- Participating in the academic schedule: course allocation to faculty/ students, managing sections.</li> <li>- Conflict resolution between students and faculty, or faculty members.</li> <li>- Treating cases of students with academic excellence and students on probation.</li> </ul>
2015-2016	Member of the <b>ABET Committee</b> . I was involved in the development of the documents for the Computer Science Department of Imam Abdulrahman Bin Faisal University, College of Computer Science and IT. The department received the maximum length accreditation with no reported “weaknesses”.
2016-present	<b>Head of the programming competition committee</b> . Under my leadership, students from Imam Abdulrahman University participated for the first time in the GPC programming competition.
	<b>Active member of approximately 8 committees at College level.</b>

<b>Academic service</b>	
<b>Scientific Publication Editor</b>	Parallel Processing Letters. 2014-present.
Conference Organization	Session Chair at the Fifth International E-Learning Conference: Cognitively Informed Technology, Bahrain, 12-20, 2015.

<b>Awards</b>	
<b>Time</b>	<b>Name of the Award</b>
16 May 2018	<b>Scientific Publishing Reward</b> , Imam Abdulrahman University. Awarded for the paper: <i>Marius Nagy, and Naya Nagy, “An Information-Theoretic Perspective on the Quantum Bit Commitment Impossibility Theorem”, Entropy, (2018), 20, 193; DOI:10.3390/e20030193</i>
09/2006-08/2008	<b>NSERC - PGS D3 Scholarship</b> (Canadian national), Scholarship offered by the National Sciences and Engineering Research Council of Canada, Postgraduate Scholarship for PhD students.
09/2005-08/2006	<b>Ontario Graduate Scholarship</b> Science and Technology (provincial)
09/1999-08/2000	Queen's Graduate Fellowship (university)

<b>Scientific and professional societies of which a member</b>	
2015-present	Institute of Electrical and Electronic Engineers (IEEE). Membership no. 92847242