

**DR. ALI M.RUSHDI**

*Professor, Dept. of Electrical and Computer Eng., King Abdulaziz University*

**Education**

<i>Degree</i>	<i>Field of Study</i>	<i>Institution</i>	<i>Year</i>
PhD	Electrical Engineering (With an extra minor in Mathematics)	University of Illinois at Urbana-Champaign (UIUC), U. S. A.	1980
MS	Electrical Engineering	University of Illinois at Urbana-Champaign (UIUC), U. S. A.	1977
BS	Electrical Engineering	Cairo University, Giza, Egypt	1974

**Academic Experience**

<i>From</i>	<i>To</i>	<i>Institution</i>	<i>Rank</i>	<i>Title</i> (Chair, Full or Coordinator, etc.)	<i>Part Time</i> or Full Time
1980	1984	King Abdulaziz Univ.	Assistant Professor		Full Time
1984	1989	King Abdulaziz Univ.	Associate Professor		Full Time
1989	Date	King Abdulaziz Univ.	Professor		Full Time

**Non Academic Experience** (including Consultations)

<i>From</i>	<i>To</i>	<i>Company/Entity</i>	<i>Title</i>	<i>Position</i> (Brief)	<i>Description</i>	<i>Full</i> or <i>Part Time</i>
1972	1972	United Austrian Iron and Steel	Trainee			Full Time
1974	1975	Egyptian Army, the Signal Corps	Officer			Full Time
2008	2009	RACI, KAU	Consultant			Part Time

**Funded Research Projects and Patents from the Past Five Years****Certifications and Professional Registrations**

1. Registered Professional Engineer In Egypt

**Current Membership in Professional Societies and Organizations**

<i>Society/Organization</i>	<i>Rank</i>	<i>Member Since</i>
1. Institute of Electrical and Electronics Engineers (IEEE)	Senior member	1973
2. Syndicate of Engineering Professions in Egypt	Member	1974
3. Club of Faculty Members of Cairo University	Member	1974
4. Club of Employees of King Abdulaziz University	Member	1980
5. Egyptian Engineers Association (EEA), Riyadh	Consultant	2009

**Honors and Awards**

1. Top Position In The 1974 Class of The College of Engineering of Cairo University.
2. Initiated Member of The Honorary Societies of Eta Kappa Nu and Phi Kappa Phi.
3. Member of The Editorial Boards of The IEEE Transactions on Instrumentation and Measurements (1986-1994), The IEEE Transactions on Reliability (1983-1998).

**Institutional and Professional Services** (*administration, committees, units, etc.*)

1. Academic Advisor and Mentor of Graduate and Undergraduate Students.

**Principal Publications/Presentations from the Past Five Years**

1. Ali M. Rushdi, "Partially-redundant Systems: Examples, Reliability, and Life Expectancy," International Magazine on Advances in Computer Science and Telecommunications, vol. 1, no. 1, pp. 1-13, 2010.
2. Ali M. Rushdi and M. H. Amashah, "Using Variable-entered Karnaugh Maps to Produce Compact Parametric General Solutions of Boolean Equations," International Journal of Computer Mathematics, vol. 88, no. 15, pp. 3136-3149, 2011.
3. Ali M. Rushdi and A. S. Balamesh, "Self-Similar Traffic Modeling of Water Resources," Journal of King Abdulaziz University: Engineering Sciences, vol. 23, no. 2, pp. 55-74, 2012.
4. Ali M. Rushdi and M. H. Amashah, "Purely-algebraic Versus VEKM Methods for Solving Big Boolean Equations," Journal of King Abdulaziz University: Engineering Sciences, vol. 23, no. 2, pp. 75-85, 2012.
5. Ali M. Rushdi and H. M. Albarakati, "Using Variable-entered Karnaugh Maps in Determining Dependent and Independent Sets of Boolean Functions," Journal of King Abdulaziz University: Computers and Information Technology, vol. 1, no. 2, pp. 1-27, 2012.
6. Ali M. A. Rushdi and F. A. Ghaleb, "A Tutorial Exposition of Semi-tensor Products of Matrices with a Stress on Their Representation of Boolean Functions," Journal of King Abdulaziz University: Computers and Information Technology, vol. 1, no. 2, pp. 101-139, 2013.
7. Ali M. Rushdi and M. H. Amashah, "A Comparison of Algebraic and Map Methods for Solving General Boolean Equations," Journal of Qassim University: Engineering and Computer Sciences, vol. 4, no. 2, pp. 1-32, 2012.
8. Ali M. Rushdi and H. M. Albarakati, "The Inverse Problem for Boolean Equations," Journal of Computer Science, vol. 8, no. 12, pp. 1-9, 2012.
9. Ali M. A. Rushdi and F. A. Ghaleb, "On Self-inverse Binary Matrices Over the Binary Galois Field," Journal of Mathematics and Statistics, vol. 9, pp. 238-248, 2013.
10. Ali M. A. Rushdi and A. A. Alsogati, "On Reduced Scalar Equations for Synchronous Boolean Networks," Journal of Mathematics and Statistics, vol. 9, pp. 262-276, 2013.
11. Ali M. A. Rushdi and H. M. Albarakati, "Construction of General Subsumptive Solutions of Boolean Equations Via Complete-sum Derivation," Journal of Mathematics and Statistics, vol. 10, no. 2, pp. 155-168, 2014.
12. Ali M. A. Rushdi and O. M. Ba-Rukab, "Switching-Algebraic Analysis of Relational Databases," Journal of Mathematics and Statistics, vol. 10, no. 2, pp. 231-243, 2014.

*\*Plus many other journal and conference papers since 2009.*

**Recent Professional Development Activities** (*Workshops, training, etc.*)

1. ABET Program Assessment Workshops, Faculty of Engineering, King Abdulaziz University, Jeddah, Saudi Arabia, 2001-2012.
2. Engineering Learning Outcomes Workshop, National Project for Assessing The Higher Education Learning Outcomes, Qiyas Centre, Ministry of Higher Education, Riyadh, Saudi Arabia, Sept. 2012