



Nezameddin Faghih

Professor

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Education

- Ph.D. in Mechanical Engineering, 1980, [Surrey University](#)
- M.S. in Mechanical Engineering (Control Systems), 1977, [Surrey University](#)
- B.S. in Mechanical Engineering (Random Signals), 1976, [Surrey University](#)

Awards

- Distinguished Researcher Award, 1999, 2000, 2002, 2005, 2006, 2007.
- Distinguished Professor Award, 2002.
- Distinguished Researcher in the Province Award, 2000.
- Academic Man of the Year Award, 1998.
- Excellence in Research Award, 1995, 1998.
- Book of the Year Author Award, 1990.

International Recognition

- Who's Who in the World, USA.
- Who's Who in Finance and Industry, USA.
- Who's Who in Science and Engineering, USA.
- The International Dictionary of Distinguished Leadership, USA.
- Asian/ American Who's Who, India.
- Eight Academic Journals: Editor-in-Chief and Associate Editor.
- Twelve Professional Memberships and Fellowships.

Research Interests

- System Engineering, Analysis and Identification.
- Stochastic Systems and Random Signal Analysis.
- Chaos and Fractals.
- Engineering Management and Optimization.

Selected Publications

Books

- N. Faghih & Ali Faghih, "Rumi and Modern Scientific Views", [Xlibris](#), 2007.
- N. Faghih & M. Loghavi, "Fuzzy Fractal Quality Control", Rokhshid Publications, 2007.
- N. Faghih & S. Forootan, "Mathematics for Management", Samt Publications, 2007.
- N. Faghih & A.E. Zadeh, "Fuzzy Control in Maintenance Planning", Navid, 2007.
- N. Faghih & F.A. Yuli, "European Quality Management", Rokhshid, 2007.

- N. Faghih & M. Sazegar, "Improving Management in Urban Water Supply", Rokhshid Publications, 2007.
- N. Faghih & A.R. Atefatdoost, "Production Line Halt: Prediction by Artificial Intelligence (Application of Neural Networks)", Zar, 2005.
- N. Faghih, "A Cryptography of Change and Development in Human Systems", Navid Publications, 2005.
- N. Faghih & Y. Najafi, "Fuzzy Reliability in Industrial Systems", Farabard Ind., 2004.
- N. Faghih & N. Nobari, "Fuzzy Quality Control", Farassan Industries Publications, 2004.
- N. Faghih & A.T. Nejad, "Aggregate Production Planning", Farassan Industries, 2004.
- N. Faghih & M.A. Hamed, "Management and Organization", Farassan Ind., 2004.
- N. Faghih & A. Honarvar, "Genetic Algorithms in Planning Preventive Inspections", Farabard Industries Publications, 2004.
- N. Faghih & S.G.H. Sadat Rafiee, "Improving Operations Management", Zar, 2004.
- N. Faghih & H.R. Sedaghat, "Fuzzy Logic and Traffic Culture", Farassan Ind., 2004.
- N. Faghih & M.A. Fazeli, "Computer Integrated Manufacturing", Navid, 2004.
- N. Faghih, "Chaos and Fractals in Dynamic Systems", University of Technology, 2003.
- N. Faghih, "Dynamic Systems: Principles and Identification", Samt Publications, 2003.
- N. Faghih, "On the Transfer of Science and Technology", Navid Publications, 2000.
- N. Faghih, "Fundamentals of System Simulations", Navid Publications, 1999.
- N. Faghih, "Control Systems", Navid Publications, 1999.
- N. Faghih, "Statistical Quality Control", Samt Publications, 1998.
- N. Faghih, "Occupational Stresses: Control and Management", Kusha Mehr, 1997.
- N. Faghih, "Love and the Entity", Navid, 1997.
- N. Faghih, "Science in: the Mathnawi of Maulawi", Navid, 1992.
- N. Faghih, "Maintenance Engineering", Navid, 1989, (Book of the Year Award).
- N. Faghih, "Elastohydrodynamic Lubrication in Human Joints", IROST, 1983.
- N. Faghih, "Globalization and Renewal of the World Order: a Systemic View", to be published, 2007.
- N. Faghih & F.A. Yuli, "Fuzzy Logic in Multiple Choice Tests", to be published, 2007.

Selected Articles

- N. Faghih, "Spectral Analysis of Sequentially Sampled Signals for Applications in Information Processing", Ir. J. Information Science and Tech., 2, 1, 2004, pp.13-28.
- N. Faghih, "Fractal Growth in Dynamic Systems and Development in Organic and Complex Systems", J. Management Knowledge, 11, 39-40, 1998, pp. 70-103.
- N. Faghih, "Chaos in Dynamic Systems and Development in Management Systems", Journal of Management Knowledge, Vol. 10, No. 35 - 36, 1997, pp. 79-101.
- N. Faghih, "On the Estimation of Missing Initial Autocorrelation Coefficients", J. Discrete Mathematical Sciences & Cryptography, 2, 2-3, 1999, pp.105-120.
- N. Faghih, "The Autocorrelation Function Extrapolation and Equivalence of Determinant and Entropy Maximizations", J.Discr. Math. Sci.& Crypt.,2,2-3,1999, pp. 93-103.
- N. Faghih, "Some Empirical Investigations of the Autocorrelation Function Extrapolation", J.Discrete Math. Sciences & Cryptography, 1, 2-3, 1998, pp. 151-196.
- N. Faghih, "An Analysis and Explanation of the Uncertainty Principle", Journal of Interdisciplinary Mathematics, Vol. 2, No. 2-3, 1999, pp. 89-99.
- N. Faghih, & B. Sohrabi, "Genetic Algorithm in Optimal Preventive Part Replacement for Minimum Downtime Maintenance Planning", J. Interdisci. Math., 2, 1, 1999, pp. 1-24.

- N. Faghih, and A. Abareshi, “Neural Networks in the Renewal Function Estimation for Equipment Replacements”, *J. Discrete Math. Sci.& Cryptography*, 2,2-3,1999, pp.121-139.
- N. Faghih, “Some Properties of the Autocorrelation Matrices for Applications in Turbulence Analysis and System Identification”, *Int'l J. of Eng. Sci.*, 7,2, 1996, pp. 35-44.
- N. Faghih, “Aliasing and Interpolating Data by Cubic Spline”, *Ir. J. Information Science and Technology*, Vol. 1, No. 1, 2003, pp. 1-23.
- N. Faghih and M. Namazi, “Applying Shannon’s Information Theory to the Measurement and Analysis of Financial Statements”, *J. Discrete Math. Sci.&Cryp*,1,1,1998,pp. 49 - 62.
- N. Faghih, “Globalization and Renewal of the Global Order: a Systemic Approach to the Management of Dialogue and the Integration of Civilizations”, *Journal of Political & Economic Ettelaat*, Vol.18, No. 201, 2004, pp 58-69.
- N. Faghih, “Chaos and Change: Management in the Process of Globalization and Integration of Civilizations”, *J. Political & Economic Ettelaat*, 18,203, 2004, pp 58-71.
- N. Faghih, “Information&Entropy Concepts in the Process of Globalization& Integration of Civilizations”, *J. Poli.&Econ.Ettelaat*, 19,205,2004, pp104-115.
- N. Faghih, “Occupational Stresses: management and Control (**Part 1**)”, *Journal of The Iranian Academy of Sciences*, 5, 8-9, 1998, pp.25-62; (**Part 2**), 5,10-11,1998, pp. 15-52.
- N. Faghih, “OPEC Oil Price Changes: A System Identification by Spectral Analysis”, *Journal of Management Knowledge*, Vol.11, No. 41-42, 1998, pp.5-39.
- N. Faghih, “Modeling and Simulation of Ergodic Data”, *Journal of Management knowledge*, Vol.12, No. 43, 1999. pp.128-143.
- N. Faghih, “Statistical Errors in Digital Estimation of Probability Density Functions”, *Journal of Management knowledge*, Vol. 13, No. 49, 2000, pp. 116-139.
- N. Faghih, “Workplace Industrial Accidents in the Vegetable Oil Factories”, *Management Studies Quarterly*, Vol. 2, No. 2-3, 1999, pp. 72-97.
- N. Faghih, “Optimal Preventive Inspection for a Required Reliability”, *Amirkabir Journal of Science and Technology*, Vol.3, No. 11, 1989., pp. 151-153.
- N. Faghih, “Ergonomics in the Design and Management of the Working Environment”, *Tabriz University Journal of Humanities*, Vol.3, No.5, 1997, pp. 149-168.
- N.Faghih, “A Study on Workplace Accidents in the Industries of the Iranian Central Province”, *Journal of Planning and Budgeting*, Vol.1, No.9, 1997, pp. 37-54.
- N. Faghih, “Control of Employment Tensions in Labor Economics (**Part 1**)”, *Journal of Political & Economic Ettelaat*, 18,197,2004,pp160-177; (**Part2**), 18,199,2004, pp.110-127.
- N. Faghih, “On the Determinate and Eigenvalues of the Autocorrelation Matrices”, *Amirkabir Journal of Science and Technology*, Vol. 7, No. 25, 1994, pp. 1-6.
- N. Faghih and Z. Shooshtarian, “Approaches Experienced in Technology Transfer”, *J. Administrative Sciences & Economics*, Vol. 11, No. 1, 1997, pp. 1-20.
- N. Faghih, “A Critical Evaluation of Ethics in the Research and Teaching of Science”, *Journal of Social Sciences and Humanities*, Vol. 8, No. 1- 2, 1992, pp. 153-164.
- N. Faghih and Sarfaraz, L., “The futurology of Information Technology Transfer”, *Journal of Management Knowledge*, Vol.6, No. 22, 1993, pp. 22- 29.
- N. Faghih, “Technology Transfer and Assimilation”, *Journal of Management Knowledge*, Vol.6, No. 21, 1993, pp. 25-31.
- N. Faghih, “Organization and Management in the Process of Research and Development”, *Journal of Management Knowledge*, Vol.8, No.27- 28, 1995, pp. 42-52.
- N. Faghih, “Technology Expansion and Transfer: a Comparative View”, *Journal of Political & Economic Ettelaat*, Vol. 15, No.165-166, 2001, pp 208-217.

- N. Faghih, "Fractal Theory: Uncovering Growth, Development and Change in Complex Systems", *J. Poli. & Econ. Ettelaat*, 16, 171, 2002, pp 184-197.
- N. Faghih, "Some Scientific Doctrines of Rumi", *J. Hamdard*, XVI, 2, 1993, pp. 79-96.
- N. Faghih and L. Sarfaraz, "Technology Transfer Issues in International Trade", *J. Standards*, 33, June 1994, pp. 11-17.
- N. Faghih and Sarfaraz, L., "Historical Backgrounds of Kish Island in International Trade as Reflected in Saadi's Works", *Free Zones*, 74, August 1997, pp. 16-21.
- N. Faghih, "The Role of Values and Ethics in the Organization of Science", in *Public Administration and Sustainable Development*, Edited by Jafari, M.J.E., De Guzman, P.P. and Reforma, M.A., Eastern Regional Organization for Public Administration, Manila, Philippines, 1994, pp. 102-107.
- N. Faghih, "State Space Approach to Stochastic Filtering for a known Autocorrelation Function", 1st Int'l Conf. on the Mathematical Theory of Control, Bombay Univ., 1991.
- N. Faghih, "State Space Modeling of Time Series", Int'l Cong. of Math., Kyoto, 1991.
- N. Faghih, "Data Simulation for known Spectra", 19th European Meeting of Statisticians, Barcelona, Sept. 1991.
- N. Faghih, "On the Preventive Maintenance Planning in Power Industries", *Power Conf.*, Ministry of Power, Abbass Port, March. 1994, pp. 90- 97.
- N. Faghih, "Preventive Maintenance Systems for Decreasing Costs and Increasing Reliability in Ships", 5th Marine Conf., Anzaly Port, May 1994.
- N. Faghih, "Mathematical Models for Optimal Preventive Part Replacements and Inspections", 1st National Maintenance Congress, Isfahan Univ. of Tech., Sept. 1994.
- N. Faghih, "Optimization of Preventive Inspection Rates for Reliability Promotion in Power Industries", *Power Conf.*, Teheran, Nov. 1988, pp. 61-56.
- N. Faghih, "Enhancing Reliability in the Industrial Systems", 20th Math. Conf., Teheran Univ., March 1989, pp. 184- 195.
- N. Faghih, "Planning for Part Replacement in Power Industries", *Power Conf.*, Teheran, Nov. 1987, pp. 69-77.
- N. Faghih, "State Space Representation of Correlated Noise", International conference on Control and Modeling, IASTED and Tehran University, July 1990, pp. 434-440
- N. Faghih, "Modeling and Generation of Time Series with Prescribed Probability Density and Autocorrelation Functions", 21st Math. Conf., Isfahan Univ., March 1990, pp. 72-89.
- N. Faghih, "The Dialogue of Civilizations: a System Approach", 1st Conf. on the Role of Social Sciences in the Dialogue of Civilizations, Shiraz Univ., Feb. 2002, pp. 123-208
- N. Faghih and H. Hoseinpour, "Development of Rural Industries: Limitations and Obstacles", *Rural Development Cong.*, Inst. for Rural Dev., Tehran, 2004, pp. 359-386.
- N. Faghih and H.A. Hamedi, "Quality Function Deployment (QFD) in the Process of Design: a Case Study", 2nd Industrial Eng. Conf., Yazd Univ., Feb. 2003, pp. 338-343.
- N. Faghih and H.A. Hamedi, "Equipment Useful Life Estimation: a Case Study", 2nd International Industrial Eng. Conf. Amirkabir Univ. & IE Society, July 2004, pp. 141-151.