

	<p>Mostafa Noruzi Nashalji</p> <p>I would like to introduce myself as Steve Nashalji. I have completed my bachelor of Engineering in Hardware from Islamic Azad University, South Tehran branch, and my Master of Engineering in Mechatronics from Khaje Nasir Toosi University of Technology. I always had the ambition of pursuing the PHD program right from my childhood days.</p> <p>I firmly believe that inquisitive and explorative attitude leads to constant learning process. As an Engineer, I look for graduate study to refine my knowledge and skills in my areas of interest. I believe it will also serve to give direction to my goal of a career as research oriented organization.</p> <p>My undergraduate final project was on shape recognition and object matching in field of image processing.</p> <p>My project work during my final year of graduate course was "Fault detection and diagnosis of the Tennessee Eastman Process using signal based dimensionality reduction technique combined with GA and Neural Classifier". It describes hybrid multivariate methods: Principal Component Analysis and Fisher Discriminate Analysis that improved by Genetic Algorithm. These methods determine main Principle Components can be used to detect and diagnosis fault during the operation of industrial process by T2 statistic, Q statistic, and neural classifier. These techniques are applied to simulated data collected from the Tennessee Eastman chemical plant simulator which was designed to simulate a wide variety of faults occurring in a chemical plant based on a facility at Eastman chemical.</p> <p>I enjoy teaching and I have formal experience, my naturally strong communication skills will help me considerably. I envisage myself as a teacher and researcher – either in industry or the university. I definitely see myself in the role of a teacher. In fact, that’s something I would enjoy immensely.</p>
<p>Research Interest:</p>	<p>System monitoring</p> <p>Fault detection and diagnosis</p> <p>Mechatronics</p> <p>Artificial neural networks</p> <p>Fuzzy logic</p> <p>Intelligent System</p> <p>Soft Computing</p> <p>System design</p>

	Computer Science Computer networking
Thesis Title:	Fault diagnosis of the Tennessee Eastman Process using signal based dimensionality reduction technique combined with GA and Neural Classifier
Abstract:	<p>This thesis describes hybrid multivariate methods: Principal Component Analysis and Fisher Discriminate Analysis that are improved by Genetic Algorithm. These methods determine main Principle Components can be used to detect and diagnosis fault during the operation of industrial process by T^2 statistic, Q statistic and neural classifier. These techniques are applied to simulated data collected from the Tennessee Eastman chemical plant simulator which was designed to simulate a wide variety of faults occurring in a chemical plant based on a facility at Eastman chemical.</p>
Supervisor:	Prof. Mohammad Teshnehlab, Dr. Mahdi Aliyari Shoorehdeli
Contact:	mostafanoruzi@hotmail.com

Education

M.Eng. in Mechatronics(Sep2007 – Feb2010) GPA: 16.09/20
Khaje Nasir Toosi University of Technology

B.S in Hardware (Sep2002 – Feb2007) GPA: 14.82/20
Islamic Azad University, South Tehran Branch

Academic Activities

Member of Young Researchers Club (2011-2014)

Member Number: 8925141008

Core-Organizer (2004-2007)

Institute of Computer Engineering, Islamic Azad University, South Tehran Branch

Research Group (2004-2005)

Institute of Computer Engineering, Islamic Azad University, South Tehran Branch

Teaching Group (2005-2007)

Institute of Computer Engineering, Islamic Azad University, South Tehran Branch

Scientific Committee Member (2004-2006)

Institute of Computer Engineering, Islamic Azad University, South Tehran Branch

Teacher Assistant (2004-2005)

Digital Design Courses, Islamic Azad University, South Tehran Branch

Co-Organizer Committees (2005-2007)

7th, 8th and 10th New Communication Technology Conference

Teaching

Lecturer (2012-current date)

Islamic Azad University. Damavand Branch

Programming Language, Computer Lab., Computer Graphics, Computer Graphics Lab.,

Lecturer (2009-current date)

Islamic Azad University. Parand Branch

Digital Design, Programming Language, Digital Electronics, Electronics Circuits, Computer Architecture and Organization

Lecturer (2011-2012:first semester)

University of Applied Science and Technology, ATIE unit

Programming Language, Object Oriented Programming

Lecturer (2010-2011:first semester)

University of Applied Science and Technology, Saaveh unit

Computer Graphics, Computer Graphics Lab., Web Programming

Lecturer (2009-2010)

Islamic Azad University. Buin Zahra branch

Programming Language, Fundamentals of Internet, Digital Electronics, Electronics Circuits Lab., Hardware II, Digital Electronics Lab.

Lecturer (2009-2010:second semester)

University of Applied Science and Technology, Tehran's second unit

Presentation

Fault Detection of the Tennessee Eastman Process using Signal Based dimensionality reduction technique with Neural Network Classifier (2009)

3rd joint Congress on Fuzzy and Intelligent Systems, Yazd, Iran

Fuzzy Sliding Mode (2008)

KhajeNasirToosi university of technology University, Tehran, Iran

Introduction to Pipeline (2003)

Islamic Azad University, South Tehran Branch, Tehran, Iran

Stream Processors (2005)

2nd New Technology Conference, Islamic Azad University, South Tehran Branch, Tehran, Iran

C#2 Specifications (2004)

New Technology Conference, Islamic Azad University, South Tehran Branch, Tehran, Iran

Introduction to HTML (2003)

Islamic Azad University, South Tehran Branch, Tehran, Iran

Publication

2012: "A Novel Feature-Extraction For Classification of RNA Secondary Structure"

Journal of American Science 2012;8(7) (ISSN: 1545-1003), PP 198-202.

Indexed by ISI.

2012: "Fault Detection in Tennessee Eastman Process Using Fisher's Discriminant Analysis and Principal Component Analysis Modified by Genetic Algorithm"

Applied Mechanics and Materials Vols. 110-116 (2012) pp 4255-4262 ,Trans Tech Publications, Switzerland.

Indexed by Elsevier: SCOPUS, Ei Compendex (CPX), Cambridge Scientific Abstracts (CSA), Chemical Abstracts (CA), Google and Google Scholar, ISI (ISTP), Institution of Electrical Engineers (IEE), etc.

March 25-27, 2011: "Classification of RNA Secondary Structure Using a Novel Feature-Extraction and Neural Network"

2011 3rd International Conference on Bioinformatics and Biomedical Technologies(ICBBT2011)

Will be published into Conference proceeding by the IEEE Press

will be indexed by the major indexing services, such as INSPEC, Ei (Compendex), and Thomson ISI

February 26-28, 2011: "Hybrid Training of Recurrent Fuzzy Neural Network Model based on PSO and DE algorithm"

2011 3rd International Conference on Machine Learning and Computing (ICMLC 2011)

Will be published into Conference proceeding by the IEEE Press

will be indexed by the major indexing services, such as INSPEC, Ei (Compendex), and Thomson ISI (ISTP)

February 26-28, 2011: "Fault Diagnosis of the Tennessee Eastman Process using Neural Network"

2011 3rd International Conference on Machine Learning and Computing (ICMLC 2011)

Will be published into Conference proceeding by the IEEE Press

will be indexed by the major indexing services, such as INSPEC, Ei (Compendex), and Thomson ISI (ISTP)

2011: " Estimating CO Conversion Values in the Fischer-Tropsch Synthesis Using LoLiMoT Algorithm"

published by Springer within the "Advances In Intelligent and Soft Computing" series Vol.96 (Soft Computing in Industrial Applications), PP.109-119, April 27, 2011

indexed by ISI Proceedings, DBLP. Ulrich's, SCOPUS, Zentralblatt Math, MetaPress and Springerlink.

2010: "Fault Detection of the Tennessee Eastman Process Using Improved PCA and Neural Classifier"

published by Springer within the "Advances In Intelligent and Soft Computing" series Vol.75 (Soft Computing in Industrial Applications), PP.41-50, September 07, 2010

indexed by ISI Proceedings, DBLP, Ulrich's, SCOPUS, Zentralblatt Math, MetaPress and Springerlink.

Reviewer of Conferences

- As a technical committee and reviewer of ICCSII 2012 (2012 IEEE Conference on Control, Systems & Industrial Informatics)
- As a technical committee and reviewer of ISBEIA 2012 (2012 IEEE Symposium on Business, Engineering and Industrial Applications)
- As a technical committee and reviewer of ISIEA 2012 (The 2012 IEEE Symposium on Industrial Electronics & Applications)
- As a technical committee and reviewer of ICCTD 2011 (3rd International Conference on Computer Technology and Development)
- Reviewer and serve on the technical program committee for ISCI 2011 (IEEE Symposium on Computers and Informatics)
- Reviewer and serve on the technical program committee for ISIEA2011 (IEEE Symposium on Industrial Electronics and Applications)
- Reviewer and serve on the technical program committee for ICSIPA 2011 (International Conference on Signal and Image Processing Application)
- Reviewer and serve on the technical program committee for ICCAIE 2010 (International Conference on Computer Applications and Industrial Electronics)

Work Experience

Implement, Cabling (2007)

Iran Tier, Sabt-e-Ahval Robat karim Branch, Emam Hossein University

Robot Design (2005 - 2006)

Islamic Azad University, South Tehran Branch (Tehran, Iran)

I was a member of “Aryana” team which is organized to participate in “Robocup Rescue-World Championship” and I was System designer in this group

IT Consultant (2003 - 2005)

TQT Company (Tehran, Iran)

HMI Programming--PLC (Summer 2005)

SAAT Company(Tehran, Iran)

Network Consultant (2001 - 2003)

Chapar Company (Tehran, Iran)

Technical Experience

Hardware Device:

MCS-51, FPGA.

Languages (for Hardware Design)

VHDL, 80x86 assembly, MCS-51 assembly, C (AVR).

Operating Systems

Mac OS X (Leopard), Windows (9X, NT, 2000, XP), Lindows.

Languages(Programming, Scripting, Markup)

Pascal, 80x86 assembly, C, C++, HTML, CSS.

Hardware IDE

Modelsim, ISE, kaily, Electronic Work Bench.

Tools

MS Office (Outlook, PowerPoint, Word, Excel, Visio), FrontPage, Latex, Photoshop, Matlab.