

# Masoud S. Nosrati's curriculum vitae

## (Seyed Masoud Nosrati)

Laboratory of Robotic Vision(LRV),  
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## EDUCATION

- |   |                        |
|---|------------------------|
| <b>PhD in Engineering Science</b>   | May 2008- Present      |
| <ul style="list-style-type: none"><li>• <i>School of Engineering Science, Department of Applied Science</i></li><li>• <i>Simon Fraser University, BC, Canada.</i></li><li>• Majoring in Intelligent System and Control</li><li>• CGPA: A+ (4.33/4.33)</li></ul> |                        |
| <b>Master of Science in Electrical Engineering</b>  | Sep 2005 –<br>Feb 2008 |
| <ul style="list-style-type: none"><li>• <i>Electrical Engineering Department,</i></li><li>• <i>Amirkabir University of Technology (Tehran Polytechnic),<br/>Tehran, Iran.</i></li><li>• Majoring in Electronics.</li><li>• GPA: 17.03/20</li></ul>              |                        |
| <b>Bachelor of Science in Electrical Engineering (with honor)</b>   | Sep 2001 –<br>Sep 2005 |
| <ul style="list-style-type: none"><li>• <i>Electrical and Robotics Engineering Department,</i></li><li>• <i>Shahrood University of Technology, Shahrood, Iran.</i></li><li>• Majoring in Electronics.</li><li>• GPA:16.92/20.00</li></ul>                       |                        |
| <b>National Diploma in Mathematics and Physics</b>  | Jul 2001               |
| <ul style="list-style-type: none"><li>• <i>School of National Organization for Development of<br/>Exceptional Talents (NODET) or (SAMPAD)</i></li><li>• GPA: 19.30/20.00</li></ul>  |                        |

## AWARDS AND ACHIEVEMENTS

- |   |      |
|---|------|
| <ul style="list-style-type: none"><li>• <b>6,250\$ Graduate Fellowship (PhD)</b><br/><i>Simon Fraser University</i></li></ul>   | 2009 |
| <ul style="list-style-type: none"><li>• <b>700\$ Nova-Tech Engineering Inc. Graduate Scholarship</b><br/><i>Simon Fraser University</i></li></ul>   | 2009 |
| <ul style="list-style-type: none"><li>• <b>6,500,000 Iranian Rials Grant from Iran Telecommunication<br/>Research Center for M.S. Thesis</b><br/><i>Amirkabir University of Technology , Tehran, Iran</i></li></ul>     | 2007 |
| <ul style="list-style-type: none"><li>• <b>Honored as the second rank undergraduate students Electrical<br/>&amp; Robotic Eng. Department ,</b><br/><i>Shahrood university of Technology , Shahrood, Iran</i></li></ul> | 2005 |
| <ul style="list-style-type: none"><li>• <b>Graduated as one of the Top Student from the highschool<br/>of NODET</b></li></ul>   | 2005 |

- **Selected as one of the young researcher (when I was 12)**  
Research topic: "Congruency in math" ( in Farsi)
- The abstract is published in *Exceptional Talents Journal*, 1995(Autumn) Vol.4 No.3

## CONFERENCE PAPERS

**Masoud S. Nosrati**, Parvaneh Saeedi,

**"A Novel Approach for Polygonal Rooftop Detection in Satellite/Aerial Imageries"**, *Accepted* for publication on the 2009 IEEE International Conference on Image Processing (ICIP 2009) Nov 7-11, Cairo, Egypt.

**Masoud S. Nosrati**, Parvaneh. Saeedi , " **A Combined Approach for Building Detection in Satellite Imageries using Active Contours,** " *Accepted* for publication on the 2009 International Conference on Image Processing, Computer Vision, and Pattern Recognition (ICCV 2009) July 13-16, Las Vegas, Nevada, USA.

Sepehr Attarchi, **Masoud S. Nosrati**, Karim Faez,

**"A New Ear Recognition Approach for Personal Identification"**, International Conference on Intelligent Computing –*ICIC2008, LNCS 5226, pp.382-389, September 15-18, 2008, Shanghai, China- Published by Springer-Verlag Berlin Heidelberg*

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Proce-  
dings  
Indexed

**Masoud S. Nosrati**, Karim Faez, Farhad Faradji,

**"Using 2D Wavelet and Principal Component Analysis for Personal Identification Based On 2D Ear Structure"**, *International Conference on Intelligent & Advanced Systems - ICIAS2007, November 25-28, 2007, Kuala Lumpur, Malaysia (will be available in IEEEXplore)*

Farhad Faradji, Karim Faez, **Masoud S. Nosrati**,

**"Online Farsi Handwritten Words Recognition Using a Combination of 3 Cascaded RBF Neural Networks"**, *International Conference on Intelligent & Advanced Systems - ICIAS2007, November 25-28, 2007, Kuala Lumpur, Malaysia (will be available in IEEEXplore)*

**Masoud S. Nosrati**, Karim Faez,

**"Using Gabor Filter and Pulse-Coupled Neural Network for Personal Verification Based On 2D Ear Structure"**, *ASIA-PACIFIC WORKSHOP ON VISUAL INFORMATION PROCESSING- VIP2007, December 15-17, 2007, Taiwan7.*

A. Ahmadyfard, **Masoud S. Nosrati**,

**"A Novel Approach For Fingerprint Singular Points Detection Using 2D-Wavelet"**, *ACS/IEEE International Conference on Computer Systems and Applications ( AICCSA), May 13-16, 2007, Page(s):688 - 691,10.1109/AICCSA.2007.370706, Amman, Jordan. (available in IEEEXplore)*

Saman Sargolzaei, Karim Faez, Hamed Bagheri, Arman Sargolzaei, **Masoud S. Nosrati**, “**Feature Extraction Based On Improved PCA Using LDA and Face Recognition Using Artificial Neural Networks**”, *ASIA-PACIFIC WORKSHOP ON VISUAL INFORMATION PROCESSING- VIP2007, December 15-17, 2007, Taiwan*

**Masoud S. Nosrati** ,

“**A New Approach For Ceramic Tile Defect Detection Using 2D Wavelet**”(in Farsi), *14<sup>th</sup> Machine Vision and Image Processing conference, Mashad, Iran, 2007*

Alireza Ahmadyfard, **Masoud S. Nosrati**,

“**New Approach For Fingerprint Identification and Verification**” (in Farsi) ,*7<sup>th</sup> Conference of Intelligence Systems, Tehran, Iran, 2005*

## RESEARCH EXPERIENCES AND ACCOMPLISHED PROJECTS

- |   |                                |
|---|--------------------------------|
| <p><b>Remote Sensing (Automatic Polygon Building Extraction in Satellite Images).</b>, (current research)</p> <ul style="list-style-type: none"> <li>• Simon Fraser University</li> <li>• Supervising by <b>Dr. Parvaneh Saeedi</b></li> </ul>  | <p>May 2008-<br/>Present</p>   |
| <p><b>Biometric Identification Based on Ear Structure.</b>,</p> <ul style="list-style-type: none"> <li>• Amirkabir University of Technology (Tehran Polytechnic)</li> <li>• My M.Sc. Thesis, Electrical Engineering Department, (Being supervised by <b>Prof. Karim Faez</b>).</li> <li>• Resulted in one technical report and two accepted international papers</li> </ul>   | <p>Sep 2006 –<br/>Feb 2008</p> |
| <p><b>Automated Ceramic Tile Defeat Detection and classification,</b></p> <ul style="list-style-type: none"> <li>• Amirkabir University of Technology (Tehran Polytechnic)</li> <li>• Examination the previous methods and Implementation the algorithms with MATLAB</li> <li>• Resulted in one technical report, one national paper and one International paper</li> </ul>   | <p>Sep 2006 – Oct<br/>2006</p> |
| <p><b>Cardiac Segmentation</b></p> <ul style="list-style-type: none"> <li>• Amirkabir University of Technology (Tehran Polytechnic)</li> <li>• Examination of scholarly achievements of the last early years and Active Contour methods particularly</li> <li>• Resulted in one technical report</li> </ul>   | <p>Mar 2006 – Sep<br/>2006</p> |
| <p><b>Fingerprint Identification and Verification,</b></p> <ul style="list-style-type: none"> <li>• Shahrood University of Technology</li> <li>• My B.Sc. Thesis, Electrical and Robotics Engineering Department, (supervised by <b>Dr. Alireza Ahmadyfard</b>)</li> <li>• Examination the previous methods and implementation the algorithms with MATLAB</li> <li>• Resulted in one technical report, one national paper and one international papers</li> </ul> | <p>Jan 2004 – Agu<br/>2005</p> |
| <p><b>Design a Line Follower Robot with Microcontroller 8051</b><br/><b>Design a simple Line Follower Robot with logical gates,</b></p> <ul style="list-style-type: none"> <li>• Shahrood University of Technology</li> </ul>   | <p>Mar 2004 – May<br/>2004</p> |

## OTHER EXPERIENCE AND TEACHING ASSISTANT

- IEEE Membership** Jan 2007- Present
- Student Member
- Served as reviewer for** 2007
- International Conference on Intelligent & Advanced Systems - ICIAS2007
- Executive Committee of the 14<sup>th</sup> Iranian Conference on Electrical Engineering** May 2006
- Organized the conference parallel sessions for Iran's top Electrical Engineering Conference.
- Teaching Assistant (Logical Design)**
- Undergraduate Course
  - Amirkabir University of Technology.
  - Responsibilities include consultation time for students, conducting tutorials, taking some quiz and marking duties.
- Sep 2006 – Jul 2007
- Teaching Assistant (Microprocessors 80x86),** Feb 2006 – Jun2006
- Undergraduate Course
  - Amirkabir University of Technology.
  - Responsibilities include consultation time for students, conducting tutorials, taking some quiz and marking duties.
- Teaching Assistant (Differential Equation),** Sep 2002 – Jan2003
- Undergraduate Course
  - Shahrood University of Technology.
  - Responsibilities include consultation time for students, conducting tutorials, taking some quiz and marking duties.

## Some Graduate and Undergraduate Courses which I took

- Image Processing (**First Rank**)
- Artificial Neural Networks (**First Rank**)
- Machine Vision
- Digital Signal Processing
- Statistical Pattern Recognition
- Satellite Communication (**First Rank**)
- Solid State Devices
- Advanced Data Communication Network
- Engineering Statistics and Probabilities-Engineering (**Second Rank**)
- Mathematics of Engineering (**First Rank**)
- Differential Equations(**First Rank**)
- Numerical Computation (**First Rank**)

## COMPUTER SKILLS

**Operating System:** DOS, Windows 98/2000/XP.

**General Software:** Word, Excel, FrontPage, PowerPoint.

**CAD Tools:** MATLAB/Simulink, OrCAD, PSpice.

**Programming Language:** C++/C#, Visual Basic, Assembly (8051).

## **My Hobbies**

- Play the music ,Tar (a Persian traditional musical instrument)
- Swimming
- Reading books (Poem and Novel)
- Research