

**CONTACT INFORMATION**

- Phone: +989132140046
- Email: [n.nickaeen@ec.iut.ac.ir](mailto:n.nickaeen@ec.iut.ac.ir)

**EDUCATION**

- Isfahan University of Technology (IUT), Isfahan, Iran, 2014 - present
  - Ph.D. in Electrical Engineering- Control Engineering
  - GPA: 95% (19.01 out of 20)
  - Dep.GPA: 90.3%
- Isfahan University of Technology (IUT), Isfahan, Iran, 2012-2014
  - M.Sc. in Electrical Engineering- Control Engineering
  - GPA: 98.2% (19.65 out of 20)
  - Dept. GPA: 80.4%
  - Thesis title: "*Modeling TGF $\beta$  signaling pathway in cell, using Petri nets*"
- Isfahan University of Technology (IUT), Isfahan, Iran, 2008-2012
  - B.Sc. in Electrical Engineering- Control Engineering
  - GPA: 93.8% (18.77 out of 20)
  - Dept. GPA: 71.7%
  - Thesis title: "*Design of a CO<sub>2</sub> Incubator*"

**PUBLICATIONS**

- Moradzadeh, Kobra, Shiva Moein, Niloofer Nickaeen, and Yousof Gheisari. "*Analysis of time-course microarray data: Comparison of common tools.*" Genomics (2018).
- Nickaeen, Niloofer, Shiva Moein, Zarifeh Heidary, and Jafar Ghaisari. "Colored petri net modeling of small interfering RNA-mediated messenger RNA degradation." Advanced Biomedical Research 5 (2016).
- Nickaeen, Niloofer, Jafar Ghaisari, Yousof Gheisari, and Shiva Moein. "*Modeling and controlling TGF- $\beta$  pathway using standard Petri Nets.*" In Electrical Engineering (ICEE), 2015 23rd Iranian Conference on, pp. 38-43. IEEE, 2015.

**RESEARCH INTERESTS**

- Multi- level modeling of biological systems
- Modeling and analyzing cell-cell communication dynamics
- Agent based modeling of cell-cell communications
- Agent based modeling of biological systems
- Petri based modeling of signaling pathways

**HONORS  
AND  
AWARDS**

- Ranked 1<sup>st</sup> for GPA among class 2014 PhD students in Isfahan University of Technology (IUT)
- Ranked 27 in the national Ph.D university entrance exam 2014
- Scholarship for studying Ph.D In Control Engineering at Sharif University of technology Without Entrance Exam, 2014.
- Scholarship for studying Ph.D In Control Engineering at Isfahan University of Technology (IUT) Without Entrance Exam, 2014.
- Winner of the Graduate Scholarship Prize for demonstration of academic excellence in two successive years, IUT, 2012-2014
- Ranked 1<sup>st</sup> among all M.Sc. Students of Electrical and Computer Engineering department, IUT, 2014
- Scholarship for studying M. Sc. In Control Engineering at Isfahan University of Technology (IUT) Without Entrance Exam, 2012
- Scholarship for studying M. Sc. in Mechatronics at Amirkabir University of Technology (AUT), Tehran, Iran, Without Entrance Exam, 2012.
- Ranked 2<sup>nd</sup> among B.Sc. Students of Control Engineering and 5<sup>th</sup> among 238 B.Sc. Students of Electrical Engineering, IUT, 2012
- Winner of the Undergraduate Scholarship Prizes for demonstration of academic excellence in four successive years, IUT, 2008-2012
- Ranked 740 among more than 319,000 participants in the National Undergraduate University Entrance Exam of Iran, 2008
- Entrance to the National Organization for the Development of Exceptional Talents (NODET) for junior high school and high school, 2001-2008

**GRADUATE  
COURSES**

Molecular Biology course (attended the class in Isfahan University of Medical Science)  
 Graph theory  
 Advanced Nonlinear Dynamics and Control  
 Dynamical Systems  
 System Identification  
 Nonlinear System Identification  
 Pattern recognition  
 Multivariable Control Systems  
 Adaptive Control Theory

**ACADEMIC  
EXPERIENCES**

- Teaching and assistance in bioinformatics workshop, 2015, Isfahan University of Medical Sciences, supervised by Dr. Yousof Ghaisari
- Teaching and assistance in bioinformatics workshop, 2014, Isfahan University of Medical Sciences, supervised by Dr. Yousof Ghaisari
- Worked as teaching assistant in PLC course, 2018, Isfahan University of Technology.

- Worked as laboratory assistant in digital control lab, Isfahan University of technology, 2017
- Worked as laboratory assistant in digital control lab, Isfahan University of technology, 2015
- Worked as the teaching assistant in “linear system: control and design” course, Isfahan University of technology, 2015
- Worked as laboratory assistant in Instrumentation lab, Isfahan University of technology, 2015
- Worked as laboratory assistant in digital control lab, Isfahan University of technology, 2014
- Worked as the teaching assistant in “Instrumentation and control systems” course, Isfahan University of technology, 2014
- Worked as laboratory assistant in Linear Control lab, Isfahan University of technology, 2012
- Worked as laboratory assistant in Instrumentation lab, Isfahan University of technology, 2011
- Worked as the teaching assistant in “Principals of Communication systems” course, Isfahan University of technology, 2011

#### Research Assistant

- Research Assistant in Control and Industrial Automation Research Center, ECE Department, Isfahan University of Technology, 2012-present  
<http://ghaisari.iut.ac.ir/control-and-industrial-automation-research-center>
- Research Assistant in Regenerative Medicine Lab, Isfahan Kidney Diseases Research Center, Isfahan University of Medical Sciences, 2014-present.  
<http://rml.mui.ac.ir/>

#### Professional Experiences

- Controlling magnetic levitation system in Advanced Control Lab by Sliding Mode Control and Feedback Linearization, 2015
- Remote Monitoring and Remote Control of Robot Arm with 5 DOF and Servo Motor DC in Digital Control Lab Using LABVIEW, 2011

**TECHNICAL SKILLS**

- For modeling and analyzing biological networks
  - Snoopy (modeling biological systems with Petri nets)
  - CPN Tools (modeling biological systems with colored Petri nets)
  - COPASI
  - Cytoscape
  - XPP AUT
  
- Engineering Software and Programming Languages
  - MATLAB & SIMULINK
  - LABVIEW
  - ORCAD
  - PCS7
  - Tia Portal
  - Proteus
  - Code vision
  - Arduino
  
- Embedded Processor Architectures
  - AVR
  - Arduino

**REFEREES**

- Jafar Ghaisari, Ph.D. (Supervisor), Associate Professor & IEEE Senior Member, Department of Electrical and Computer Engineering, Isfahan University of Technology, Isfahan, 84156-83111, Iran, Tel.: +98 0313 391 5398, Fax: +98 313 391 2451, E-mail: ghaisari@cc.iut.ac.ir  
Website: <http://ghaisari.iut.ac.ir> .
- Yousof Ghaisari, Ph.D. (Supervisor), Assistant professor, genetics and molecular biology department, faculty of medicine, Isfahan university of medical sciences, Phone: +98-031-36687087, Email: ygheisari@gmail.com, ygheisari@med.mui.ac.ir.