

Farzin Negahbani

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EDUCATION	Shiraz University , Shiraz, Fars, Iran GPA 15.40/20 <ul style="list-style-type: none">▪ B.Sc. in Computer Hardware Engineering 2013 – Present▪ Supervisor: Professor Reza Sameni<ul style="list-style-type: none">• Design and Implementation a Xilinx FPGA Development Board for FPGA Lab, CSE School of Shiraz University Kamal High School , Tehran, Tehran, Iran <ul style="list-style-type: none">▪ Diploma in Physics and Mathematics GPA: 19.38/20 2009 – 2013
INTERESTS	Robotics, Artificial Intelligence, Bio-Electric, Embedded Systems, Circuit Design, GPGPU Programming, Digital Signal Processing
INTERNSHIP & WORKSHOP	Deep Learning Workshop 2017, Research Center for Intelligent Vision and Image Processing of Shiraz University. Jul 2017 <ul style="list-style-type: none">▪ Workshop Lecturer: Professor Ali Ghodsi, University of Waterloo▪ In this 3 day workshop i became familiar with DNN basics and using DNN as a generative model or a strong classifier. Also doing some sample projects with Jupyter notebook using Tensorflow. Summer Internship at Namazi Hospital Surgery Room, Shiraz, Iran Summer 2016 <ul style="list-style-type: none">▪ Getting acquainted with almost all surgery room instruments.▪ Renewing Namazi Hospital Surgical Light. Summer Internship on RF Circuit Design Summer 2015 <ul style="list-style-type: none">▪ Design MultiLayer sandwich construction RF circuits.
PUBLICATIONS	<ul style="list-style-type: none">▪ E. Asali, A. Moravej, S. Akbarpoor, O. Asali, M. Katebzadeh, S. Tafazol, F. Negahbani, M. Valipour, S. Mirjan, H. Mehran, A. Bitaraf Haghighi, Y. Khoshghadam Borazjani, Persian Gulf Soccer 2D Simulation Team Description Paper in RoboCup 2017 Symposium and Competitions: Team Description Papers, Nagoya, Japan. 2017
AWARDS & HONORS	<ul style="list-style-type: none">▪ 6th Rank in Soccer Simulation 2D RoboCup 2016, Shiraz Team, Leipzig, Germany. 2016▪ Ranked 4th in IranOpen Rescue Junior Secondary League, Tehran, Iran. 2011▪ Ranked 1st in SALAMCUP Advanced Line Follower League, Tehran, Iran. 2010▪ Ranked 2nd in Robots In The City Line Follower League, Tehran, Iran. 2010
SELECTED PROJECTS	Design and Implementation a FPGA Development Board for CSE School of Shiraz University FPGA Lab 2017 <ul style="list-style-type: none">▪ B.Sc. Thesis▪ This Board includes FPGA Spartan6 LX9 with 14-bit 85-Mhz ADC, 14-bit 125-Mhz DAC, USB, seven segment, Active Filters and ... desigend for Signal processing targets in 3 different versions.▪ Supervisor: Professor Reza Sameni Real time Graphic rendering using QT OpenGL Based on Embedded GPU-based boards, Jetson TegraTK1 2017 <ul style="list-style-type: none">▪ Rendering a Plan Position Indicator simulator with more than 18 million points at 30 FPS.▪ Supervisor: Professor Farshad Khunjush Data gathering Software for Throma patients 2017 <ul style="list-style-type: none">▪ Web Based data bank gathering Throma patients data for later analysis for Namazi Hospital.▪ Supervisor: Professor Mohammad Sadegh Masoudi Design and Implementation a device for getting Digital Video output of a Light Microscope 2017 <ul style="list-style-type: none">▪ A device with goal of gathering raw image data from pathology departments, Namazi Hospital.▪ Supervisor: Professor Amir Reza Dehghanian

- Define Embedded Systems Lab Course of Computer Department of Shiraz University.** 2017
 - Define and Design First Embedded System Lab Manual of Computer Department of Shiraz University.
 - This course includes simulation(LabView, Proteus), Design(Altium Designer), Hardwares(Orange Pi, Arduino) and frameworks(OpenCV)
- Video Processing, Real Time Object Detection Using Cascade Classifying Based on Embedded GPU-based boards, Jetson TegraTK1** 2016
 - Shiraz University GPU Programming Course
 - Supervisor: Professor Farshad Khunjush
- Implementing Instantaneous Frequency Measurement on FPGA** 2016
 - Using James B. Y. Tsui, William S. McCormick invented method. implemented on a Spartan-3 400K-Gates Xilinx FPGA.
 - Supervisor: Professor Reza Sameni
- Online Noise Cancellation using Adaptive Filters** 2016
 - Shiraz University Signal Processing course
 - Eliminating surroundings noise using adaptive filters. the adaptive filter designed using LMS method and simulated using matlab then implemented using JAVA.
 - Supervisor: Professor Reza Sameni
- Controller Dashboard of a Data Center Cooling System** 2015
 - Eram Data Center Company.
 - Implementing a Cross platform Dashboard on Beagle Bone Black using python to Observe and Control Data Center Cooling System through RS485 Port and Provides a Web Based dashboard for remote control.
- Define Microprocessor lab Course of Computer Department of Shiraz University.** 2015
 - Define a new microprocessor Lab Course Based on AVR Micro.
 - This course includes basic

IN PROGRESS

- Developing trainer and analyzer Software for Robocup 2D Soccer Simulation**
 - The software includes log analyzer and formation detection parts (uses DNN to detect formation) that reports efficiency of pass, shoot, dribbling, formation, attack, defence and going To be released in 2 months.

RELATED COURSES

Pattern Recognition(Master Course)(not graded yet), GPU Programming(18/20),Re-configurable Architectures(15/20), Embedded Systems (20/20), Microprocessor(20/20), Advanced and Applied programming (17.9/20), Operating Systems(16.43/20)

TEACHING ASSISTANT

Teaching Experience MicroProcessor Lab, 3 Classes 48 students, Shiraz University Spring 2015
Teaching Experience Micro Processor Lab, 4 Classes 64 students, Shiraz University Spring 2016
Teaching Assistant Micro Processor course, Shiraz University 2017

SKILLS

- Programming Languages**
 - Verilog, CUDA, Java, Python, JavaFX, C, C++, Matlab, HSpice, PHP
- PCB Design**
 - High Frequency PCB Design With Altium Designer
- Frameworks and library**
 - OpenCV, VisonWorks NVIDIA, TensorFlow, TesnorRT
- Simulation And Software**
 - Proteus, MATLAB & Simulink, Solid Works, WireShark
- MicroControllers and Embedded Systems**
 - FPGA Xilinx, ARM(Cortex M3), AVR(Xmega, ATmega), BeagleBone Black, Jetson TK1

REFERENCES

- Associate Professor Reza Sameni**
 - Chair of Department of Computer Science & Engineering & IT, Associate Professor of Electrical & Computer Engineering, Shiraz University, Senior Member of IEEE
 - reza.sameni@gmail.com

Assistant Professor Farshad Khunjush

- Chair of ICT Center of Shiraz University, Assistant Professor at Electrical & Computer Engineering, Shiraz University
- fkhunjush@gmail.com

Associate Professor Mohammad Sadegh Masoudi

- Deputy of Namazi Hospital, Associate Professor at Shiraz University of Medical Science.
- masoudims@gmail.com