Sina Shirinpour

School of Electrical and Computer Engineering
University of Tehran

Email
Tel.:+98 ...

RESEARCH INTERESTS

Rehabilitation Engineering
Neuroengineering
Biomedical Instrumentation
Imaging

EDUCATION

School of Electrical and Computer Engineering *Tehran, Iran*
University of Tehran
B.Sc student in Electrical Engineering - Electronics *2010 - present*

- *Total Passed Credits:* **130**
- *GPA(up to now):* **17.18/20** *(***3.66/4***)*
- *Last Year GPA:* **18.44/20** *(***4/4***)*

Allameh-Tabatabaei Highschool *Tehran, Iran*
Diploma in Mathematics and Physics (GPA: **19.28/20***)* *2006 - 2010*

PUBLICATIONS

M. Saviz, S. Shirinpour, A. Abedi, R. Faraji-Dana, "A Novel Approach to Computing Induced Electric Fields in Biological Structures Based on Sequences of Transfer Functions," Iranian Journal of Biomedical Engineering, Volume 6, no. 2, pp. 133-140, 2012.

HONORS & AWARDS

Among the top 20% of Electrical Engineering Students in the School of ECE
University of Tehran *2014*

Ranked 94th among More than 85,000 Participants in National University Entrance Exam *2010*

University of Tehran Exceptional Talent Entrance
Awarded Admission via Exceptional Talents Department *2010*

Reached the Second Round of National Mathematics Olympiad *2009*
Reached the Second Round of National Physics Olympiad *2009*
Reached the Second Round of National Chemistry Olympiad *2009*
Reached the Third Round of Robocop Programming Competition *2007*

LANGUAGE SKILLS

Persian
Native
English
TOEFL iBT: **104 (Reading: 30, Listening: 29, Speaking: 23, Writing: 22)**
GRE CBT: **(Verbal Reasoning: 156, Quantitative Reasoning: 170, Analytical Writing: 4)**

ELECTIVE COURSES

- *Advanced Programming (C++)* (**Grade: 18.6/20**)
- *Device Fabrication Lab* (**Grade: 20/20**)
- *Digital Signal Processing (Current Semester)*
- *Operations Research (Current Semester)*

TEACHING EXPERIENCE

Microprocessors Course
Teaching Assistant *2013*
Prof. Fatemi , ECE Department, University of Tehran

Electronics I Course
Teaching Assistant *2013*
Prof. Sanaee , ECE Department, University of Tehran

EXPERIENCES

Internship
Bioelectromagnetics Lab: *2013*
Supervisor: Dr. Mehrdad Saviz , ECE Department, University of Tehran
Advisor: Prof. Faraji-Dana , ECE Department, University of Tehran **Grade: 20/20**

- *Simulating Electric Fields Induced in Human Body by Electoromagnetic Waves Using CST*
- *Designing & Implementing an Accurate Heater for Bio Related Experiments*
- *Simulating Electrical Characteristics of a Cell with the Electrical Circuits Model*
- *Simulating Micromodel of a Cell to Obtain the Electrical Characteristics Using CST*

Conference Organization
Assisted in Organizing the Conference of Electromagnetic Fields and Living Organisms *2013*

TECHNICAL SKILLS

Programming:

- *Proficient in C/C++, MATLAB & Simulink*
- *Familiar with Assembly*

Hardware:

- *Proficient in Atmel AVR microcontrollers*
- *Proficient in HSpice, ADS, Multisim, Proteus ISIS, ModelSim and Quartus II*
- *Familiar with Altium Designer (PCB Design)*
- *Familiar with Intel x86 & FPGA*

Other Skills:

- *Proficient in MS Word, MS PowerPoint, MS Excel, HTML & CSS*
- *Familiar with CST*
- *Familiar with TEX, LATEX*

MAJOR PROJECTS

Bachelor Thesis: Designing an IPG Device for DBS Method *2014*
Advisor: Prof. Shoaei , ECE Department, University of Tehran
We are trying to make an "Implantable Pulse Generator"which stimulates a specific part of brain (Deep Brain Stimulation) to produce dopamine in order to correct unwanted shaking or some other symptoms caused by Parkinson's disease by compensating the dopamine deficiency in that zone locally.

Designing a Controller for an Automatic Lane Changing Car Using MATLAB *2012*
Linear Control Systemes Course Project
Prof. Adhami , ECE Department, University of Tehran
First, we modeled a lane changing car, then we designed several controllers to satisfy the characteristics needed for this problem and we used MATLAB to simulate the controlled system to check the answers.

Designing & Implementing a Training Board Using AVR Microcontroller *2012*
Microprocessor Course Project
Prof. Fatemi , ECE Department, University of Tehran
We designed a training board to show other students how to use different features of a Microcontroller such as timer, interrupt, I/O, running a LCD & USART, then we implemented it on PCB board.

Several Projects about Signal Processing Using MATLAB *2012*
Signal & Systems Course Project
Prof. Sabbaghian , ECE Department, University of Tehran
We did several projects to get familiar with fundamentals of signal processing such as filtering signals, processing a distorted sound to retrieve the original one, convolution & other basic calculations in time and frequency domain.

HOBBIES

Watching Movies

Reading Novels

Playing Sports

REFERENCES

Prof. Kolahdouz, *School of Electrical and computer Engineering, University of Tehran*

Prof. Fatemi, *School of Electrical and computer Engineering, University of Tehran*

Prof. Rashed-Mohassel, *School of Electrical and computer Engineering, University of Tehran*

Dr. Saviz, *School of Electrical and computer Engineering, University of Tehran*

Links to places and people are attached to their names