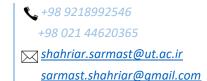
## Curriculum Vitae

# Shahriar Sarmast



#### **EDUCATION**

2017-2019

M.Sc., Electrical Engineering, majored in Power Electronics, Sharif University of Technology, Tehran, Iran.

GPA: 17.15/20

B.Sc., Electrical Engineering, majored in Electronics, Sharif University of Technology, Tehran, Iran.

**2012-2016** GPA: 15.92/20

#### RESEARCH EXPERIENCE

• 10kW secondary side converter for a Dynamic Wireless Power Transfer system at **Advanced Motion Systems Lab**, under supervision of Dr. S. Vaez. **University of Tehran**. (2020-2022)

- M.Sc. Thesis Project: "Optimization of Dynamic Wireless Power Transfer for Maximum Power Transmission in Electric Vehicles", under supervision of Dr. F. Tahami, Electrical Engineering Department, Sharif University of Technology. (2018-2020)
- B.Sc. Thesis Project: "Design and Implementation of 1Phase to 3Phase Inverter for 2KW Pump", under supervision of Dr. F. Tahami, Electrical Engineering Department, Sharif University of Technology. (2016)
- Internship: Conducting a research project on "Wireless Video Telecommunication", under supervision of Dr. R. Sarvari,
   Isfahan Houshmand\_Farayand co.

  (Summer 2015)

## **PUBLICATION**

 S. Sarmast, H. Tarzamni, F. Tahami and J. Kyyra, "Improved Resonant Converter for Dynamic Wireless Power Transfer Employing a Floating-Frequency Switching Algorithm and an Optimized Coil Shape," in IEEE Access,2022

## LANGUAGE SKILLS

Persian: Native

English: Fluent (IELTS Overall Band Score 7.0)

## WORK EXPERIENCE

- Head of R&D in Afrouz co. (Research and Design LED Lightings and Low Power LED Drivers), Esfahan, Iran.
- Research Assistant in Advanced Motion System Laboratory, Tehran University, Tehran, Iran.
- Circuit Designer in Houshmand Farayand co. (Design and Implement SMPS for Touch Switches), Esfahan, Iran.
- Electronics Teaching in Allame Helli School (NODET), Tehran, Iran.

#### HONORS AND MEMBERSHIPS

 Ranked 84<sup>th</sup> in the Nationwide Mathematics and Physics University Entrance Exam, among more than 260,000 Contestants in Iran.

(Summer 2012)

• Ranked **7<sup>th</sup>** in National Graduate Entrance Exam, among more than 30,000 Contestants in Iran.

(Spring 2017)

Ranked 2<sup>nd</sup> in Autronics, National Electronics & Coding Contest, Amirkabir University, Tehran, Iran. (Spring 2016)

• Tournament of Towns Diploma, International Mathematic Contest, Moscow, Russia.

(Summer 2010)

• Executive Secretary of TPES, Technologies of Power Electronics Seminar, Sharif University of Technology, Tehran, Iran.

(Winter 2015)

• Financial Assistance of RESANA, Scientific-Cultural Club of Electrical Faculty of Sharif University of Technology, Tehran, Iran

(Fall 2015-2016)

• Executive Member of Sharifcup, Robotic Competition of Sharif University of Technology,

Tehran, Iran. (Summer2015)

#### COMPUTER SKILLS

Programming:

EXPERT: C/C++, Verilog, Assembly(x86), LADDER, Visual Basic

FAMILIAR: Visual C, Python

Software and Development Tools:

Matlab/Simulink, MPLAB, Ansys Maxwell, Altium Designer, PSim, Plexim, PSCAD, PowerFactory, PSPICE,

HSPICE, Codevision, Proteus, Step7

General Tools: Microsoft Office, Adobe Photoshop, CorelDraw
Operating Systems: Windows, Linux, Ubuntu, Raspbian (Raspberry Pi)

Microcontrollers: STM32, dsPIC, AVR, LPC

#### SELECTED COURSES AND GRADES

•	High Power Electronic Convertors	(18.7/20)
•	Power Electronics in AC/DC Microgrid	(17.7/20)
•	Resonant Converters and Soft Switching	(17.1/20)
•	Implementation of Power Electronics Converters	(20/20)
•	Control of AC-DC Machines	(17.7/20)
•	Power Electronics Principals	(18/20)
•	Electrical Machines & LAB	(17.5/20)
•	Microprocessor System Design	(20/20)

## **TASHIP**

•	Power Electronics Principals LAB	(Spring 2018)
•	Energy Conversion and Electrical Machines LAB	(Spring 2019)

## **ACADEMIC PROJECTS**

•	Graphical MP3 Player on LPC1768 ARM (Dr. E. Sanaie)	(Spring 2015)
•	Power Simulation and Control of 500W Parallel Resonant Converter (Dr. F. Tahami)	(Spring 2018)
•	Monitoring and Processing of Agricultural Data (Dr. A. Nobakhti)	(Spring 2020)
•	10kW Multiphase Buck Converter for Impedance Matching of DWPT Secondary (Dr.S. Vaez)	(Spring 2021)

## OTHER PROJECTS

- 160A Permanent Magnet Actuator Driver for 20kV-3Ph Recloser, TRS 2022
- Cooperator Robots with PID algorithm, SharifCup Competition 2014
- Fingerprint Detection on Raspberry Pi
- 5V 3A Flyback Power Supply, using TNY275
- 12V up to 40W Buck Driver, using Digital Micro controller pic16f1823
- 300W Plant Growth LED with Bluetooth Controller on Android, Afrouz co.
- Levitating Lamp (Wireless Power Transfer + Magnetic Levitation)

## REFERENCE

Dr. Shahriyar Kaboli
 Director of High Voltage Power Electronic Laboratory
 Associate Professor
 Sharif University of Technology

Sharif University of Technology Phone: (+98 21) 6616 5944 Email: kaboli@sharif.edu Dr. Farzad Tahami
M.Sc. Supervisor
Associate Professor
Sharif University of Technology
Phone: (+98 21) 6616 5961

Email: tahami@sharif.edu