

EDUCATION

2017-2019

M.Sc., Electrical Engineering, majored in **Power Electronics**, Sharif University of Technology, Tehran, Iran.
GPA: 17.15/20

2012-2016

B.Sc., Electrical Engineering, majored in **Electronics**, Sharif University of Technology, Tehran, Iran.
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.
- **Chief Electrical Engineer** in Green and Silver Leaves co.  (Design and Implement Automated Biological Microscope), 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 **84th** in the Nationwide Mathematics and Physics University Entrance Exam, among more than 260,000 Contestants in Iran. **(Summer 2012)**
- Ranked **7th** in National Graduate Entrance Exam, among more than 30,000 Contestants in Iran. **(Spring 2017)**
- Ranked **2nd** 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. **(Summer 2015)**

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 Convertors (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

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