

EDUCATION

University of Kurdistan

B.S. in Electrical Engineering, last 2 years GPA: 3.3/4, overall GPA: 3.0/4

Kurdistan, IRN

Sep 2016–Feb 2021

- Bachelor's Thesis, Under the Supervision of Dr. Rahmatollah Mirzaei
- Analysis and design of a DC/DC boost converter for getting high performance.

University of Bu-Ali Sina

M.S. in Electrical Engineering, overall GPA: 3.5/4

Hamedan, IRN

Sep 2021–present

- Master's Thesis, Under the Supervision of Dr. Mohammad Mehdi Shahbazi
- Real simulation of PCB for quasi-resonance fly-back converter

HONORS AND AWARDS

- **Ranked Twenty**, among all 120 electrical engineering graduate students in the University of Kurdistan. 2020
- **Top Egithy Percent**, among all engineering students in the University of Bu-Ali Sina. 2023
- **Granted**, National university tuition waiver (including partly necessary expenses). 2016
- **Granted**, National university tuition waiver (including partly necessary expenses). 2021

RESEARCH INTERESTS

- Power Electronics: Design, modeling, and manufacture DC/DC and DC/AC converters
- Electric vehicle: Battery management system, Charging infrastructure, V2G Application
- Variable fuel power plants with high efficiency
- Power System: Design, smart grid, security, Distributed energy
- Reneable Energy: Wind and PV Power Conversion

EXPERIENCE

Electrical Engineering Department, University of Kurdistan

Research Project, Under the Supervision of **Dr. Rahmatollah Mirzaei**

Kurdistan, IRN

Winter 2021

- Investigation of DC/DC converter
- Conducting research on DC-to-DC converters to obtain a new topology so that a higher gain can be obtained from the output of the circuit.

Electrical Engineering Department, University of Bu-Ali Sina

Research Project, Under the Supervision of **Dr. Mohammad Mehdi Shahbazi**

Hamedan, IRN

Fall 2021 to Fall 2023

- Investigation of DC/DC fly-back converter
- Extensive research on DC to DC fly-back converters. and working on quasi-resonant converters in the field of changing the topology and output gain of the circuit using new quasi-resonant IC controllers.

Mad Niro Gharb Company

Internship

Hamedan, IRN

Summer 2019 Summer 2020 Summer 2021

- Perform electrical wiring in the power grid
- Conducting 20-kilowatt line electrification in different areas of the power grid. Transformer operations in various areas of the power network. Conducting landlines for industrial companies

TEACHING

- **Teaching Assistant** at University of Kurdistan
Circuit I, Electronic I, Electrical Machine II
- **Teaching Assistant** at University of Bu-Ali Sina
Electrical Machine I, Electrical Machine III, Linear Control Industrial Electronics Power Electronic

ACADEMIC AND PRACTICAL PROJECTS

- **Real simulation of PCB for quasi-resonance fly-back converter (Course: Final Project)**
Design and simulation of a DC to DC quasi-resonant fly-back converter using LM6565 quasi-resonant controller and obtaining the designed circuit PCB.
- **Design and implementation of timers for traffic lights (Course: Digital lab)**
Design, simulation and coding related to the timer of an intersection traffic light.
- **Design of a 30-bus power network in powerworld simulation (Course: Power system I,II)**
Designing a network of 30 buses to obtain the values of active and reactive power, voltage and current values of the lines, prevent overloading and check the network conditions at the time of error..
- **Ultrasonic rangefinder project with Arduino board (Course: Digital lab)**
Construction and design of an Arduino board for distance measurement between objects.
- **Wiring drawing and execution (Practical project)**
Cooperation in the design and implementation of internal wiring of 3- story building. (Practical project)

SKILLS

- **Programming:** C, Verilog, VHDL, MATLAB
- **Application:** Proteus, Code Vision, OrCAD PSpice, multisim, Powerworld simulation
- **Markup languages:** L^AT_EX, HTML
- **Basic Software:** Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Microsoft Office Access

LANGUAGES

- **English:** Advance
- **TOEFL:** 90 (27/27/18/18)
my TOEFL score expire in December 2023. I have retake exam in November 11
- **Farsi:** Native

RELATED COURSES

- Principles of telecommunication systems (20/20, Top Marks)
- Operation of power systems (18/20, Top Marks)
- Industrial Electronics (17/20, Top Marks)
- Pulse and digital circuits (18/20, Top Marks)
- Power Electronic (19/20, Top Marks)
- Reliability of electrical energy systems (20/20, Top Marks)

REFERENCES

- **Mohammad Mehdi Shahbazi Ph.D.**
– Email: m.shahbazi@basu.ac.ir
- **Majid Ghaniee Zarch Ph.D.**
– Email: m.gahniee@basu.ac.ir
- **Saleh Razini Ph.D.**
– Email: s.razini@basu.ac.ir
- **Rahmatollah Mirzaei Ph.D.**
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