BARDIA TAHERI

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EE Department, Sharif University of Technology, Tehran, Iran
LinkedIn

INTERESTS

- Power Electronics
- Converter Design, Control, and Reliability
- Renewable Energy Systems
- Photovoltaic Systems
- Transportation Electrification (truck, aircraft, UAV, EV)
- Wireless Power Transfer

EDUCATION

- **B.Sc. in Electrical Power Engineering** *Sep. 2019 - Ongoing*
  - Sharif University of Technology GPA: 3.2/4 (3.48/4 In-person classes)[Unofficial Transcript]
- **Diploma in Physics and Mathematics Discipline** *Sep. 2016 - July 2019*
  - Allameh Helli High School GPA: 4/4

HONORS AND AWARDS

- "**Ranked 70th among more than 150,000 participants in National University Entrance Exam, Admitted to Sharif University of Technology.(Best engineering university in Iran), Fall 2019**"

PUBLICATIONS

- "**Clinical IoT in Practice: Design and Development of a Self-Power Smartband for Health Monitoring(To be Submitted)**"
  In this paper, both hardware and software designs of an self-power, IoT-based wristband are introduced. The developed wristband performs healthcare capabilities, including heart rate measurement, pulse oximetry, Electrocardiogram (ECG) waveform, pedometer, and sleep monitoring.

RESEARCH EXPERIENCES

B.Sc. Thesis — *Sharif University of Technology*
October 2022 - Ongoing
Supervisor: *Dr. Askarian Abyaneh*

- **Designed and Built of Flyback Converter Used in Power Supplies.**[View Project Board Here]
  "With the help of Altium Designer, I created a Flyback Converter project with success. This converter efficiently produces a 5V output within an input voltage range of 18–36V, and the project encompassed every stage of development, from the initial design through to verification, ensuring that it met the necessary standards for performance through testing and validation."

Research Intern — BIOSEN
October 2022 - June 2023
Supervisors: *Prof. Daryoosh Vashaee and Bardia Baraeinejad*

- "An ultralow-power IoT wristband with healthcare capabilities such as heart rate measurement, pulse oximetry, ECG waveform, pedometer, and sleep monitoring has been developed. The wristband utilizes an optimized hardware and software design, including a Thermoelectric Generator (TEG) for self-powering."

Research Intern —Vebko Amirkabir
July 2023 - August 2023
Supervisor: *Dr. Askarian Abyaneh*

- **Design, Construction, and Verification of a High-Efficiency Cuk Converter for Power Supply Applications.**[View Project Board Here]
  "Using Altium Designer, I successfully designed and implemented a Cuk Converter project. The converter effectively converts a 4 to 20 volt input range into a steady 5 volt output at a switching frequency of 1 MHz. I was in charge of managing the project's various phases. I verified and validated the converter's performance to ensure it met expectations."

Research Intern — Vebko Amirkabir
August 2023 - Ongoing
Supervisor: *Dr. Askarian Abyaneh*

- **Design, Implementation, and Verification of an LLC Resonant Converter used in solar systems.**[View Project Board Here]
  "I've designed an LLC resonant converter using Altium Designer, engineered for input voltages between 350-400 volts, and it produces a stable 330V output at 2A. The next stage is to test it thoroughly to ensure its performance and appropriateness for solar system applications."

Research Intern — Power Electronics Research Laboratory
Jul 2023 - Ongoing
Supervisor: *Dr. Tahami*

- **Optimizing Auxiliary Power Supplies in Solar Systems: Enhancing Efficiency and Reliability through Soft Switching Converters.**
  "My project focuses on optimizing auxiliary power supplies in solar systems. I will investigate soft switching converters to enhance efficiency and reliability by decreasing voltage and current stress on switches. This project aims to make the power supply more efficient and cost-effective."

TEACHING ASSISTANTS

- **Energy Conversion 1** : Dr. Askarian Abyaneh, Fall 2023
- **Power Electronics 1** : Dr. Askarian Abyaneh, Spring 2023 and Fall 2023
- **Energy Conversion 1** Dr. Hajipour, Spring 2023
- **Energy Conversion 1** : Dr. Tahami, Spring 2022

TECHNICAL STRENGTHS

Programming Languages	Matlab, Python , C/C++, Java.
Tools	Altium Designer, Simulink, Psim, SPICE, Proteus, TINA, Verilog.
Documentation Preparation	LaTeX, Microsoft Office

SELECTED COURSE

Here is a selected list of courses I have taken or I am attending:

- **Solar Energy Systems*** (Attended cross-departmental course but unable to take the exam due to non-departmental affiliation)
- **Electric Vehicles*** (18/20) , (4/4)
- **Automotive Electrical and Electronic Systems**(Attending)
- **Power Electronics 1** (20/20) , (4/4)
- **Energy Conversion 1** (15/20) , (3/4)

* Graduate Course

LANGUAGE

Persian	Native
English	Highly Fluent (Toefl Result)(Reading(29), Listening(24), Speaking(23), Writing(22))