

Riad Fikani

Riad@fikani.com | (202)913-8529 | Canadian

West Lafayette, IN, 47906

SUMMARY

I'm a student at Purdue University studying Electrical Engineering. I am interested in circuit design, embedded systems, and autonomous vehicles. I am currently seeking an internship for summer 2022 where I'll be able to use my skills and knowledge to work on an innovative and challenging product.

EDUCATION

Bachelor of Science in Electrical & Computer Engineering.
Minor in Mathematics.

Purdue University • West Lafayette, IN • 2024

ENGINEERING PROJECTS

Analog audio equalizer with volume control

Purdue ECE • May 2021

- Designed an analog audio equalizer with volume control on Spice that meets specific requirements.
- Built the analog audio equalizer with volume control using a breadboard and the Analog Discovery 2.
- Integrated the circuit with an amplifier and speaker.
- Documented all my work in a final report that provides a full description of the project including design.

Synchronous sequential machine

Purdue ECE • Fall 2021

- Derived the next-state equations, then designed the circuit to meet specific requirements.
- Built all three parts, the Next-state Logic, the State Memory, and the Output Logic.
- Simulated a coded Moore Machine using SystemVerilog on an FPGA.

Discrete inverting operational amplifier

Purdue ECE • Mars 2022

- Utilized KiCad to design an inverting operational amplifier with a gain of -1.5.
- Simulated the op-amp using LTspice.
- Built the op-amp incrementally, starting with the current mirror, then differential amplifier, followed by the common-source amplifier and source follower.

RELEVANT COURSEWORK

ECE 20001/20007: Linear circuit analysis & lab 1.

ECE 264: Advanced C programming. (Spring 2022).

ECE 20002/20008: Differential circuit analysis & lab 2. (Spring 2022)

CS 159: Fundamentals of C programming.

INVOLVEMENT

Member

Institute of Electrical and Electronics Engineers- IEEE • August 2019 – present

3D Printing Club (3DPC) • August 2021 – present

Boiler Blockchain • August 2021 – present

SKILLS

Technical Skills: Python, C programming, MATLAB(Simulink), Autodesk AutoCAD, Spice, SystemVerilog, KiCad, EAGLE, LTspice, PSpice, SolidWorks, Oscilloscope, Soldering iron, Network Analyzer, Excel (macros, pivot tables), Altium Designer, Linux/Unix shell scripting.

Industry Knowledge: Project Management, Engineering Design.

Soft Skills: Resourcefulness, Storytelling, Multitasking, Collaboration, Public Speaking.

Languages

Fluent: English.

Native: French and Arabic.

Portfolio: <https://www.notion.so/riadfikani/Hello-there7201fbe916b6466d854c9955adb61a93>