## Mohamed A. Belakhoua

202-867-8931 | mab21@illinois.edu linkedin.com/in/mohamed-a-belakhoua/ Born in St Louis, MO, 1999

#### **OBJECTIVE**

Seeking an internship/co-op in the fields of electrical engineering and embedded systems.

### **EDUCATION**

## **University of Illinois at Urbana-Champaign**

Champaign - Urbana, IL

Bachelor of Science in Electrical Engineering with Minor in Computer Science

Dec 2022

GPA: 3.50/4.00

Related Coursework: Digital Systems Laboratory, Data Structures, Analog/Digital Signal Processing

#### **WORK EXPERIENCE**

#### SIEMENS HEALTHINEERS

Jan 2022 -

**Electrical Engineering Intern** 

- Built a new version of the SPECT detector test board
- Designed the I2C communication protocol between FPGAs and ADCs
- Augmented the I2C FPGA master codebase to be able to read and write in 2 bytes of data

STARZ ELECTRONICS Jun 2021 – Aug 2021

Electrical Engineering Intern – Research and Development

- Worked on the development of a smart thermostat using an STM32H735G-DK development board
- I used CubeMX, CubeIDE and TouchGFX to connect the sensors, program the chip and the user interface.

STARZ ELECTRONICS Jun 2020 – Aug 2020

Automation and Embedded Systems Engineer Intern – Research Team

- Programmed Raspberry PI based medical respirator to monitor and stabilize air pressure and oxygen levels
- Built dashboards displaying detailed machine data to be used by doctors for patient care. (Node-Red)
- Developed wireless communication for Remote Terminal Units (RTUs) to control remote machines via "LoRa"
- Designed and prototyped main circuit board for the RTUs based on NXP processor

#### **CAMPUS LEADERSHIP & INVOLVMENTS**

MEN'S SOCCER TEAM

NJCAA Division I

Aug 2017 – May 2019

- Student-Athlete full scholarship
- Received M-WAC all Conference Academic Team personal award
- Committed 30 hours per week to training, meetings, travel, and competitions

MATH CLUB PRESIDENT Aug 2019 – May 2020

- Directed and supervised overall operations and staff activities of the club
- Attended and participated in various events as club's representative

# MEMBER OF IEEE AT THE UNIVERSITY OF ILLINOIS PEER TUTOR

Aug 2020

Aug 2019 – Dec 2019

Tutored fellow undergraduate students in mathematics, physics, and computer science courses

## **SKILLS & HONORS**

**HONORS:** Dean's List

**TECHNICAL:** Soldering, C, C++, Python, and System Verilog **LANGUAGE:** English, French, and Arabic (Fully Trilingual)