

## Sam Hachem

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A Graduate Student with Specialization in Software Engineering, Embedded Systems and Architecture

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## EDUCATION

### UNIVERSITY OF ILLINOIS AT URBANA – CHAMPAIGN, GRAINGER COLLEGE OF ENGINEERING

Urbana – Champaign, IL

GPA: 3.7/4.0

- Bachelor of Science in Computer Science, BS Dec 2021
- Master's In Computer Science, MCS Dec 2022

## EXPERIENCE

### S&C ELECTRIC COMPANY

Chicago, IL

Software Engineering Intern

Jun 2021 – Aug 2021

- Integrated the technologies of Roambee into S&C systems for asset management and tracking
- Developed new technologies and techniques for the Fabrication and Production lines
- Developed an app for COVID-19 check-in process
- Integrated registration and attendance process for Safety and Training Department into S&C Systems
- Leveraged Raspberry Pi Capabilities for Embedded Systems applications

## PROJECTS

### IoT PICAR, SMART CAR

Champaign, IL

Embedded Systems Engineer

Aug 2021 –

- Integrated different sensors and systems such as 4WD Hat and ultrasonic sensor into a raspberry Pi through GPIO
- Developed obstacle avoidance and detection code for smart navigation using tensorflow libraries
- Developed a Web App using Node.js for wireless navigation and communication with the Picar
- Collaborated with teammates on self-driving software capabilities

### CONDOR FOR THE COMMON MAN INVESTMENT APP

Champaign, IL

Software Developer

Jan 2021 – May 2021

- Primarily developed a python library to leverage the TraderAPI resources for stock and option data gathering
- Developed a robust backend system using Django to serve specific, and at large data, about stock and option requests
- Built a sophisticated mechanism to make option calls based on the condor model
- Contributed to the development of the frontend in react native for both web and mobile development
- Built the design for a stock ticker profile and graph using react libraries and bootstrap

### DATABASE ORIENTED NUTRITION APP

Champaign, IL

Full stack developer

Aug 2020 – Dec 2020

- Primarily worked on developing the backend code base for the Web App using Django Frameworks
- Developed a sophisticated and robust Meal and Diet suggestion Algorithm
- Gathered millions of food and nutrients entries from various sources
- Built a MySQL backend Database system for different food types as well as their nutritional values.
- Fixed bugs related to the backend systems

## SKILLS

- Technical: C, C++, Python, Java, Swift, Assembly, Django Framework, CUDA Programming Model, MySQL, Neo4j, MongoDB
- Embedded Systems: Arduino and Raspberry Pi and platforms such as Google Firebase, CLion, IntelliJ IDEA, and Xcode
- Language: English, Arabic and French (Fully trilingual)