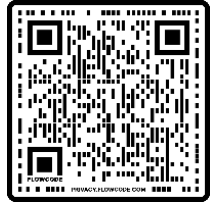


# Hamzah Issa

[hamzahissa@tamu.edu](mailto:hamzahissa@tamu.edu)

(682) 808-2025

[Hamzah's Website](#)



Passionate results-driven Electrical Engineering Senior and future Masters Student poised to revolutionize the industry with innovative solutions through an internship/ co-op.

**Courses:** *Digital Signal Processing, Power Electronics, Digital Motion Control, Electronic Motor Drive, Electric Conversion*

## Work Experience

### SIEMENS AG, INTERNSHIP – Atlanta, Georgia

May 2023 – August 2023

- Revamped UL Dust Test Chamber resulting in **152%** reduction costs and **100%** increase testing efficiency.
- Orchestrated a comprehensive strategy for DC breaker testing used in futuristic **DC/AC** hybrid power grid.
- Conceptualized a software simulation to replicate breaker short circuit simulation saving about **\$695/ Day**.
- Collaborated on the backup interface unit smart power management for substations, transformers, electric vehicles.

### GRADUATE RESEARCH LABORATORY – with Dr. Prasad Enjeti

August 2023 – Present

- Detecting cyber intrusions on inverters and ensuring system's overall security.
- Developing advanced **BESS** and **SESS** technologies for smart energy storage.
- Engineer **second-life batteries** aiming to extend their usability and environmental impact by repurposing in secondary applications such as BESS.

### INTERNATIONAL Co-Op at BOJAMHOOR – Doha, Qatar

June 2020 – July 2021

- Designed circuitry of internet servers, **HVAC** systems, distribution boards, and **Honeywell** smoke detector systems in **thirteen** public schools across the nation.
- Reconstructed circuitry from the transformer to distribution board in the buildings lowering project cost by **30%**.

## Leadership & Extra-Curricular

### SAMSUNG Senior Design Project – Austin, Texas

August 2023 – Present

- Collaborating with Samsung on automating monthly generator test processes at their fabrication labs in Austin.
- Programming an application that will run on Samsung tablets streamlining and automating test procedures.

### FORMULA ELECTRIC SOCIETY of AUTOMOTIVE ENGINEERS (F-SAE)

June 2022 – Dec 2022

- Coordinated electronics team executing **BSPD** circuit design in the Formula vehicle to improve safety by **10-20%**.
- Financed components budget decreasing cost by an average of **40%**.

### Project Team Lead and Member at Eta Kappa Nu National Honors Society (HKN-IEEE)

January 2020 – Present

- Spearheaded a team of engineers working on various projects.
- Engineered solar panel to track sunlight increasing power generation efficiency by **5%**.

### Society of Hispanic Professional Engineers (SHPE), Technical Division Team

August 2021 – Present

### Institute of Electrical and Electronics Engineers (IEEE) Member

August 2020 – Present

### Engineering IT Specialist

May 2022 – May 2023

### Engineering Teacher Assistant

August 2020 – Present

## Education

Texas A&M University | College Station, TX

B.S. EE May 2024, M.S. EE December 2024

Bachelor of Science in Electrical Engineering

GPA: 3.5

Dean's Excellence Award

## Skills

- ETAP, SolidWorks, C++, PSIM, Python, MATLAB, HTML, CSS, LT Spice, LabVIEW, GitHub, Creo, Tableau.
- English: Native or Bilingual Proficiency, Arabic: Native or Bilingual Proficiency.