

# James Clayton Crews

Lexington, SC | j.clayton.crews@gmail.com | 803.429.3761 | jccrews.com

## Introduction

---

I am interests/involvements include research in ML architecture and the development of real-time hardware systems. My graduate thesis is towards speeding up simulations of power converters using physics-informed neural networks, in line with my work on the Digital Twins for Power and Energy Systems (NPES) project.

My current goal is to pursue a position that is in need of research/development regarding ML engineering applications.

## Skills

---

**PyTorch**, C++, MATLAB, **Python**, ASP .NET, SQL, Java, HTML, CSS, ROS, Firebase, React.JS, TypeScript, RedwoodJS(React Framework), Kotlin, Linux/Unix OS

## Education

---

**University of South Carolina – MS in Computer Engineering** Jan 2024 – Present

- Expected Graduation: May 2025
- GPA: 3.625

**University of South Carolina – BS in Computer Engineering** Aug 2021 – Dec 2023

- GPA: 3.846

**University of Alabama in Huntsville – BS in Computer Engineering** Aug 2020 – May 2021

- GPA: 3.781
- Transferred to UofSC

## Experience

---

**Digital Twins for Navy Power and Energy Systems (NPES)**, Aug 2024 - Present  
University of South Carolina – Columbia, SC Apr 2024 - May 2024

- Speed up simulation of power converters using neural networks for a digital twin of Naval energy system.

**RISC ARLIS Intern**, University of Maryland – College Park, MD [Remote] May 2024 - Aug 2024

- Research on security and intelligence challenges.

**LEAP-HI**, University of South Carolina – Columbia, SC Jan 2024 - Present

- Develop wireless sensor packages with conductivity probes for distributed real-time soil saturation assessment in levees. *NSF Award Abstract # 2152896*

**Wordification Project**, University of South Carolina – Columbia, SC May 2023 - Present

- Develop a "gamified" approach to teaching K-2 children how to spell based on phonics rather than memorization.

**Software Engineering Intern**, Lexington Medical Center – Lexington, SC Aug 2019 - Jan 2020

- Develop an application to query an outdated medical record database.

## Grants & Awards

---

**South Carolina Space Grant Consortium – STEM Outreach Award:** May 2024

**President's List** Fall 2022 - Spring 2023

**Dean's List** Fall 2020 - Spring 2023