

# Isaac Forster

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iforster.net

## Education

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### The University of Tennessee, Knoxville, TN

Bachelors of Science: Electrical Engineering  
Anticipated Graduation: Fall 2020  
Cumulative GPA: 3.03/4.00

## Engineering Experience

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### Paragon Energy Solutions (formerly ATC Nuclear)

Engineering Intern May 2017 - August 2017

- Assisted Engineering with the qualification of an air compressor system for a nuclear power plant
- Designed a test rig to control the output of the air compressor during seismic testing
- Designed a motor starter system to interface the 110V control signal from the compressor to the 480V compressor motor
- Developed a test method to perform bearing vibration analysis of an electric motor using Fourier analysis saving money and preventing a major delay

### The Chemours Company, New Johnsonville Titanium Technologies

Engineering Co-op August 2016 - December 2016

- Led model creation project for 10+ radiation-based level transmitter applications
- Evaluated failure modes for 15kV power conditioning capacitor banks leading to additional capacitors being added to four banks
- Maintained and updated maintenance procedures, engineering drawings, and SAP structure by adding 20+ previously undocumented lightning arrester banks to SAP
- Developed a plan to integrate surplus transmitters into plant DCS

## Other Experience

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### University of Tennessee at Martin

Private Tutor Fall 2017

- Assist a blind/hearing-impaired student with coursework

### Humphreys County Board of Education, Waverly TN

Substitute Teacher May 2016

- Taught classes as a substitute teacher across all grade levels

### The Ken Wallace Family Farm, McEwen TN

Farmhand 2012-2014

- Performed maintenance on various facilities and equipment and operated heavy equipment as a critical team member with the Wallace Family

## Skills & Abilities

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### Software Suites

- Eagle EDA
- AutoCAD

### General Skills

- GNU/Linux
- Electronics Assembly
- Technical Writing

### Programming

- C Programming Language
- Various Assembly Languages
- Mathematica
- Python
- LaTeX

## Honors & Activities

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- Creating a computer from scratch using early 80's technology (ongoing)
- Boy Scouts of America, Eagle Scout
- Chairman, McEwen FFA Parliamentary Procedures Team: National Gold Winner
- State FFA Degree
- Member IEEE