

HARDWARE ENGINEERING

INTERNSHIP OVERVIEW

PTx is passionate about using science and technology to improve agriculture. The PTx team develops innovative products that improve the lives of growers and make agriculture more sustainable, efficient, and profitable. The PTx Hardware Engineering Intern will receive hands-on experience in different areas of product development, based in Tremont, Illinois. This paid internship will focus on cutting-edge projects developing on-farm planting and harvesting systems for advanced precision agriculture applications.

Responsibilities:

- Schematic capture and PCB layout for MCU-based to multi-processor embedded modules
- Bench-level bring-up and functional testing of prototype assemblies
- Component selection and BOM development, including cross-reference and availability review
- Pre-compliance bench testing and interpretation alongside an experienced EMC/ESD and certification engineer, including near-field probing, ESD simulation, and conducted and radiated pre-scans
- Application of design-for-EMC and design-for-ESD techniques: filtering, grounding and shielding, ESD protection device selection, and low-emission layout practices

Required Skills/Experience:

- Enrolled in a BS or MS program in Electrical or Computer Engineering (or equivalent)
- Coursework or project experience with circuit design, schematic capture, and PCB layout; Altium preferred, equivalents considered
- Comfortable reading and interpreting datasheets independently
- Strong communication skills and experience being a flexible team player
- Cumulative GPA of at least 3.0/4.0
- Personal transportation
- Willingness to relocate to the Tremont/Peoria, IL area if necessary

Desired Skills/Experience:

- Coursework or project exposure to EMC, ESD, signal integrity, or electromagnetics
- Hands-on experience with lab and bench instruments (oscilloscope, spectrum analyzer, near-field probes, ESD simulator)
- Experience with MCU-based or Linux-based embedded hardware designs
- Exposure to CAN bus or other industrial communication protocols

Apply Here



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