



PERSONAL OBJECTIVE

Fourth-year multidisciplinary engineering student with a strong foundation in controls and show networks, seeking full-time position post-graduation. Passionate about bringing ambitious creative visions to life through innovative automated staging, attractions, and live experiences, combining technical precision and artistic ingenuity.

INDUSTRY EXPERIENCE

Controls Integration Intern TAIT | *May-Aug. 2024*

- Performed critical high/low voltage and network cable terminations for custom 30' telescopic lift attraction
- Consulted electrical drawings and cable schedule from engineers to verify cable types and wire connections
- Followed LO/TO and construction site safety procedures

Head of SFX and Entertainment Events Tech Busch Gardens Tampa Bay | *May-Aug. 2023*

- Tested and repaired 30+ pneumatic and animatronic effects in four haunted houses
- Adjusted programming/timing and sensor positions to achieve desired scare effect
- Wrote detailed documentation and created troubleshooting guides for House Technicians to maintain SFX operation
- Howl-O-Scream named Top 2 Best Theme Park Halloween Events by USA Today (2023)

PROJECT EXPERIENCE

DMX Decoder Engineering Capstone Project | *Spring 2025*

- Designed, built, and tested DMX decoder to provide control of RGBW LED strips to ETC Ion XE lighting console
- Developed custom user interface with 7-seg. display to allow for effortless user input of primary DMX address
- Adhered to ANSI E1.11 standards, including electrical isolation of RS-485 transceiver from Arduino and PWM-driven MOSFET control circuits

Scale Model Dark Ride Show Networks Lab | *Spring 2023*

- Designed and built a MIDI network in QLab to control a scale model dark ride. Used a line following cart, 4 iMacs, a PLC, 5 LCD panels, 6 speakers, and 6 RGBW lights

PLC Project Controls Lab | *Fall 2022*

- Built a PLC, wrote ladder logic programs, and designed control systems to match various typical stakeholder needs. Projects included: Gradually opening wall over course of show, haybale wall crashing down around actor

Bright Star (Asst. Technical Director) Purdue Theatre | *Spring 2024*

- Designed, drafted construction drawings for and managed the assembly of a flown train flat
- Custom features included: 3D printed railing accents, CNC machined foam header, CNC machined masonite sign
- Ensured project success with budget and time estimates, precedence diagram, Gantt chart, load-in/strike plans

SKILLS AND CERTIFICATIONS

SHOW CONTROL	TAIT Navigator, QLab, ETC Nomad
CAD	AutoCAD, NX, 3ds Max, Excel, Sketchup, Vectorworks
CODING	Ladder logic, MATLAB, C, Excel, Arduino IDE
SKILLS	Wire terminations, cable management, soldering, carpentry
COURSEWORK	Control systems, show networks, machine design, statics, dynamics, strength of materials
CERTIFICATIONS	OSHA 10 and 30, NYC SST, ABET-accredited degree

LEADERSHIP AND ADDITIONAL INVOLVEMENT

- Boiler Box Band Brigade Leader, Outstanding Boiler Box Band Member Award recipient, Gold and Black Sound Student Leader *Fall 2021-Present*
- Mellophone in Purdue All-American Marching Band *Fall 2023-Present*
- 215 hours logged for the Operations and Logistics Volunteer Management Team *Fall 2022-Present*
- Stage Machine Design Competition, awarded Most Elegant Implementation, tied for Best Teamwork *Spring 2023*

REFERENCES