

Bodhi Beard

Electrical Engineer I, Marine

☎ (256) 555-7142

✉ bodhi.beard@example.com

🌐 linkedin.com/example/bodhibeard

📍 Huntsville, AL 35801

STRENGTHS

- 🔧 **Marine Design Thinking**
Craft projects turned load requirements into practical interfaces. A routing review often revealed better installation choices.
- ♥ **Clear Documentation**
AutoCAD drawings used consistent symbols and identifiers. Lab partners found troubleshooting steps easier to follow.
- 🦋 **Analytical Discipline**
Voltage drop comparisons connected calculations with measurements. Differences became useful discussion points during laboratory reporting.
- 👥 **Collaborative Reviews**
Faculty and peer feedback shaped drawing revisions. Open risks became clearer before final design presentations.
- ⚙️ **Practical Integration**
SolidWorks models accounted for access, mounting, and clearances. Small physical details improved confidence in installation concepts.

SKILLS

Marine Electrical Design

Component Selection

Craft Cabling Cable Routing

Schematic Diagrams

Wiring Diagrams

Component Installation

Junction Box Design

Protective Device Analysis

Voltage Drop Analysis

Power Analysis System Interfaces

SUMMARY

Early career **electrical engineering** candidate completing a Bachelor of Science in Electrical Engineering in 2027, with focused marine design experience across craft electrical systems, component selection, cabling, schematics, wiring diagrams, and system interfaces. Academic projects apply AutoCAD and SolidWorks to define installation details, junction box concepts, routing constraints, and production ready technical documentation. Laboratory work includes voltage drop calculations, power analysis, **protective device coordination**, **low voltage distribution**, and comparison of calculated and measured results. Supervised design reviews strengthened written and oral communication with faculty and multidisciplinary student teams. Practical work reflects careful attention to constrained vessel installations, clear engineering assumptions, and controlled drawing revisions. U.S. citizen prepared for required security investigation and classified information eligibility, with strong interest in contributing dependable **electrical design** support within a first shift marine engineering environment.

EDUCATION

Bachelor of Science in Electrical Engineering

The University of Alabama in Huntsville 🎓 GPA: 3.7 📅 2027 📍 Huntsville, Alabama

Coursework: Marine electrical systems, circuit analysis, power systems, electronics, engineering design

TECHNICAL SKILLS

- **Electrical Design Software:** AutoCAD, SolidWorks, Autodesk Learning
- **Marine Electrical Systems:** Craft electrical systems, vessel systems, marine distribution
- **Electrical Documentation:** Schematic diagrams, wiring diagrams, installation details
- **Power Analysis:** Voltage drop analysis, load summaries, power demand
- **Protective Devices:** Protective device analysis, coordination, selectivity
- **Cable Engineering:** Craft cabling, cable routing, conductor selection
- **Interface Design:** Junction boxes, system interfaces, interface hardware
- **Component Engineering:** Electrical components, electronic components, rating selection
- **Circuit Systems:** Low voltage distribution, branch circuits, feeder circuits
- **Engineering Communication:** Technical reports, oral presentations, design reviews
- **Design Verification:** Calculated results, measured results, verification plans
- **Marine Integration:** Craft layouts, installation constraints, subsystem integration

EXPERIENCE

Marine Electrical Systems Design Student

Capstone Project 📅 August 2026 - Present 📍 Huntsville, Alabama

Supports a faculty supervised small craft electrical design effort, defining architecture, interfaces, protection, installation details, and technical documentation for multidisciplinary review.

- Defined small craft **electrical architecture** from **load requirements** and component selections for faculty review.
- Created AutoCAD schematic and **wiring diagrams** connecting source, distribution, protection, and representative electronics.
- Modeled installation envelopes and junction box concepts in SolidWorks around access and routing constraints.
- Calculated **voltage drop** and power demand across operating cases, documenting assumptions and design margins.
- Performed **protective device coordination** exercises, then revised distribution choices after faculty selectivity review.
- Presented **cable routing** risks and verification plans, incorporating panel feedback into controlled drawing revisions.

Electrical Design Laboratory Student

AutoCAD SolidWorks

Technical Documentation

LANGUAGES

English Native

Spanish Beginner

MY CAREER



● Marine Electrical Systems Design Student at Capstone Project (2 Months)

● Electrical Design Laboratory Student at Student Lab (4 Months)

● Marine Electronics Integration Project Student at University Project (3 Months)

Student Lab 📅 January 2026 - May 2026 📍 Huntsville, Alabama

Completed supervised laboratory assignments involving low voltage distribution, component ratings, electrical documentation, enclosure modeling, measurement, and technical reporting.

- Built a **low voltage distribution** bench representing source, protection, cabling, loads, and instrumentation.
- Selected components from supplied specifications, matching ratings with load, voltage, interface, and protection needs.
- Produced **AutoCAD** schematic and wiring documentation that supported partner assembly and troubleshooting.
- Compared calculated and measured **voltage drop** across cable lengths and load conditions in laboratory tests.
- Created a **SolidWorks** enclosure and junction box layout around connector access and installation clearances.
- Demonstrated system performance to instructors, explaining interfaces, protective choices, test methods, and results.

Marine Electronics Integration Project Student

University Project 📅 September 2025 - December 2025 📍 Huntsville, Alabama

Developed a course supervised marine electronics **integration** concept connecting navigation, sensing, and power distribution within a defined small vessel scenario.

- Designed a **marine** electronics interface concept connecting navigation, sensing, and **power distribution** elements.
- Mapped cable routes through a **craft** arrangement, balancing access, separation needs, and connection points.
- Created wiring and interface diagrams identifying power, signal, and junction connections for peer review.
- Completed load summaries and **voltage drop** calculations, refining conductor and protective device selections.
- Modeled electronic component mounts in SolidWorks and documented installation notes for integrated review.
- Delivered a technical presentation and memo covering assumptions, interface risks, and verification activities.

PROJECTS

Small Craft Power Distribution Study 📅 2026

Evaluated craft loads, voltage drop, protective devices, and cable routing through a practical design study. Findings supported clearer interface definitions and more reliable installation planning.

Marine Electronics Interface Concept 📅 2025

Connected navigation, sensing, and power distribution elements within a small vessel scenario. Peer review helped clarify routing decisions, installation notes, and verification needs.

LEADERSHIP & AWARDS

- Dean's List, 2025, recognized sustained academic achievement in electrical engineering coursework.
- Engineering Capstone Design Scholarship, 2026, supported focused study in marine electrical systems design.
- Undergraduate Technical Presentation Recognition, 2026, honored clear communication of engineering decisions and results.

CERTIFICATIONS

- AutoCAD Foundations 📅 2026
- SOLIDWORKS Associate Preparation Coursework 📅 2026

PROFESSIONAL AFFILIATIONS

- Electrical Engineering Peer Mentor, 2026, supported classmates through practical design questions and review preparation.

- Student Design Review Committee Member, 2026, helped assess technical presentations and provide constructive feedback.
- Campus Engineering Outreach Volunteer, 2025 - Present, connected prospective students with hands on engineering activities.

ADDITIONAL INFORMATION

Work Status : Authorized to work in United States. No sponsorship required.

REFERENCES

AVAILABLE ON REQUEST