

Benjamin E. Lane

6465 Newland St
Arvada, CO 80003

Cell: (860) 861-7277
BLane1010@gmail.com

- Objective** Seeking a position as an Engineer which will allow me to gain experience in a broader range of electrical systems, with the ability to become a project manager or supervisor.
- Summary** Electrical Engineer with six years experience in power distribution systems. Engineering expert for AC electrical distribution systems. Independently managed large design changes involving cost estimating, engineering calculations, drawing review, technical documentation, specification verification and multiple organizations.
- Work Experience** General Dynamics, Electric Boat Corporation - Groton, CT
11/2008 – 10/2009 *Senior Engineer*
- Continued cognizance of power distribution systems, with the addition of static automatic bus transfer switches and a new arc fault detection system.
 - Lead engineer for redesign of the VIRGINIA Class Submarine power distribution system to accommodate an increase in overall loading of 150% from baseline. This involved detailed calculations for load analysis, breaker coordination, fault current, phase balancing, and voltage drop. Using these calculations the necessary hardware changes were determined, this included replacement of transformers to increase size, replacement of automatic bus transfer switches(ABT's) with Static ABT's, addition of larger power distribution panels and replacement of 90% of the existing power cables.
 - Took over as lead engineer for redesign of the arc fault detection system to reduce installation time and cost for future ship sets and allow the ability to monitor 38 additional components. Efficiently brought this task back on schedule and eliminated risk by completing all design efforts.
 - Performed power system testing with static ABT's to validate continuity of power during transfers and compatibility with power sources.
 - Additional responsibilities include providing cost estimates for new designs, support of preliminary and critical design reviews, reviewing design changes as requested by the customer, training and managing work for new engineers, and recommending process improvements for the company.
 - Thorough knowledge of 700VDC, 450VAC, and 120VAC power systems.
- 01/2004 – 10/2008 *Engineer*
- Cognizant system engineer for 450 VAC and 120 VAC VIRGINIA Class Submarine power distribution systems; which includes, transformers, automatic bus transfer switches, circuit breakers, switchboards, distribution panels, passive and active ground detection systems, and an arc fault detection system.
 - Performed detailed calculations for load analysis and voltage drop on all 450 VAC and 120 VAC power systems.
 - Daily responsibilities include providing engineering evaluation of technical problems; review of design changes, review of factory test reports and procedures for compliance with ship specifications and military standards; and interfacing with the customer, vendors, designers, other engineering departments and shipyard workers.

05/2000 – 08/2003 *Summer Hire Program - Engineer Trainee*

- Created engineering procedures to calibrate transducers more accurately.
- Simulated fault currents and provided analysis results for circuit breakers.
- Redesigned web pages using HTML and Photoshop to allow easy access to department guidelines and capabilities.
- Streamlined the ability of engineers to obtain information by creating databases and reports in Microsoft Access, Word and Excel.

Projects

Senior Design Project:

Development of a microcontroller based data logging system for use in commercial solar portable power supplies. Created all required code for the PIC 18F type microcontroller along with the circuit board design, enclosure and interface.

Independent Projects:

Development of an LED array which displays various frequencies and amplitudes based on audio input.

Education

University of Connecticut - Storrs, CT
Bachelor of Science in Electrical Engineering

Computer Skills

MS Office, LabVIEW, Matlab, PSpice, MpLab, Adobe Flex, Lotus Notes

Security Clearance

Active Department of Defense “Secret” security clearance

References

Available upon request.