DANIEL BANNIGAN

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PERSONAL WEBSITE: DANIELBANNIGAN.COM LINKEDIN.COM/IN/DANIELBANNIGAN
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PERSONAL STATEMENT

- I am a dedicated young professional that goes beyond my duties using past experience, technical knowledge, innovative thinking, and tireless work ethic to effectively find solutions when confronted with complex problems.

EMPLOYMENT HISTORY

Burke E. Porter Machinery Company

Field Engineer – Controls ***May 2018 to Current***

- Startup new automated test equipment i.e. the configuration of VFDs, Ethernet switches, transducers, I/O blocks, various switches and sensors, safety devices, and the verification of wiring to print
- Use Rockwell software to read and modify PLC code to achieve desired machine behavior and revise HMI screens
- Use knowledge of controls systems architecture to quickly diagnose and troubleshoot a problem

Bosal Industries North America - Emissions Control Division

Manufacturing Engineering Intern ***May 2016 to May 2018***

- Performed root cause analysis on machines with excessive downtime or scrap rate
- Designed and implemented solutions to improve uptime and quality and realized improvements by measuring OEE
- Designed and fabricated reference tools used to measure subassembly components to track dimensionality over time
- Designed and implemented handbooks for daily maintenance tasks to ensure continuous correct setup of equipment
- Assessed ROI's and cost savings in a diverse range of improvements to our processes and presented to management

Supply Chain Intern ***May 2015 to May 2016***

- Applied lean manufacturing methodologies to the material handling system in an exhaust system manufacturing plant
- Designed and fabricated material handling racks for kitting and line feeding to improve assembly times
- Developed standard work instructions, performed cycle time studies, and balanced lines for assembly operations
- Assisted new program launch by controlling incoming parts, developing layout, and troubleshooting new equipment
- Followed raw pipe through bending, cutting, pressing, and sizing operations to ensure quality parts delivered to line

University of Michigan - Tauber Institute - Operations Leadership Factory

Instructional Aide ***September 2014 to August 2016***

- Lead teams from industry in learning lean manufacturing methods in 50/50 classroom/mock production floor setting
- Aided in exercises to introduce: kaizen, gemba walk, 5S, standard work, job instruction training, built-in quality, TPM, Ishikawa diagrams, 5-why's, poka-yoke, value stream mapping, SMED, heijunka, kanban, kitting, one-piece flow

EDUCATION

University of Michigan Ann Arbor - Mechanical Engineering Graduated April 2018

Coursework: Manufacturing System Design, Design for Manufacturability, Advanced Energy Solutions, Controls, Electrical Circuits, Mechanical Behavior of Materials, Heat Transfer, Fluid Dynamics, Solid Mechanics, Physics I & II, Thermodynamics
Awards / Involvement: Winter 2017 Dean's List / IM Football, Dodgeball, Broomball, Michigan Euchre Club Design Chair

ENGINEERING TEAM PROJECTS

Design and Manufacturing III ***Fall 2017***

- Design and build a prototype device to separate prepupal Black Soldier Fly larvae from organic waste for Ann Arbor based *Kulisha* to combat overfishing for livestock feed and easily recycle otherwise cumbersome organic waste

Design and Manufacturing II ***Winter 2016***

- Designed, fabricated, and tested an automated laser detection and reflection system
- Used computer aided analysis on the device to make efficient choices for motor specification and transmission design

Laboratory I & II ***Fall 2016 – Winter 2017***

- Designed and conducted experiments with provided equipment in order to solve a technical problem
- Analyzed experimental data and delivered findings in memo report format complete with proper error analysis

KEY SKILLS

- ***Software***: SolidWorks – CAMWorks – Inventor – Microsoft Office – LabView – MiniTab – Gimp
- ***Design:*** Functional Decomposition – Design for Manufacturability – Sketching – Motor Sizing – Experiment Design – Creating Engineering Drawings and Manufacturing Plans – Creating Assembly Diagrams