**ADAM MCGOUGH**

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| **Education** | B.S. Manufacturing Industrial Technology – *Dec 2003*  ***Tennessee Technological University****, Cookeville TN*  MBAA Engineering Course, *Portland, OR* - *Sept 2014*  A two-week course discussing various engineering topics relating to brewery operations/setup. |
| **Employment** | **Engineering Manager –** *Oct 2015 – Current*  **Advanced Automation and Robotics – Sterling Heights, MI**  Moved from being part time designer to full time Engineering Manager that is responsible for all aspects of designing customer's equipment from quoting to installations. I am one of two main points of contact for the customer for engineering related items. I am responsible for creating all concepts for our customers and planning the overall machine operation sequence. I manage outside vendors for part manufacturing and purchasing. As needed I will also travel to customer sites to do project setup and programming.    **Mechanical Engineer –** *Sept 2013 – Oct 2015*  **Advanced Automation and Robotics – Sterling Heights, MI**  Came on board part time to add a mechanical design division to AAR. AAR had been an electrical contract company with occasional mechanical design for years and wanted to add ability to the company. I came on as a part time, distance, engineer to aid in standards creation, and for creating machine designs to fulfil customer requirements. As this was a new direction for the company, we acted very much like a startup to expand the client base.  **Process Engineer**- *Mar 2013 - Oct 2015*  **Brewery Ommegang – Cooperstown, NY**  Main responsibilities include process/equipment evaluation and upgrades, managing the maintenance department, ordering spare parts, and creating department budgets. This position includes working with overseas engineering management to evaluate and plan facility/equipment modifications. I brought all PLC and Robot programming in house saving the company on average $30,000/year, as well as improving up-time due to availability of a programmer. I completely upgraded the control system in the brewhouse from an older Allen-Bradley SLC based processor to a new Control-Logix processor. This project alone made the system more efficient by allowing a greater level of automation that this brewery has never had. I retrofitted an air assisted grain out system and auto rake height control to the lauter tun. This improved mean time between batches on average of 10 min due to decreased vessel occupation time.  **Engineer III/Sr. -** *Jan* *2012 — Mar 2013*  **Sumitomo Electric Wiring Sys. - LaVergne, TN**  Main responsibilities are the commissioning and setup of robotic CNC bending equipment and the design of the manufacturing area. The facility started off as a distribution center and was modified, per my drawings, to a manufacturer of automotive wiring harnesses. This included long term travel to Japan to learn the technology, complete the assembly lines and to create and execute a plan to bring the assembly line back to the USA. Currently the line is running at the La Vergne, TN facility. With the help of a Japanese to English translator converted all PLC's and Machine Displays from Japanese kanji to English Language with the ability to change back and forth depending on the user's primary language. Trained machine operators in the most efficient ways to run the systems.  **Lead Engineer -** *Aug* *2007 – Jan 2012*  **Bullard Machine – White House, TN**  Responsible for the day to day operation of the engineering department and its staff. This includes all aspects of designing/commissioning customer equipment for use in their facility. Was the main “point person” for interacting with the customer for engineering related items. Responsible for preparing quotes on projects and then keeping the project on time and budget. The majority of my time was spent working on the mechanical design of the equipment; however electrical design/programming was also my responsibility. This dual responsibility required me to be very flexible in my skill set with the ability to adapt to the customer’s requirement seamlessly.    **Automation Engineer -** *Feb 2004 - Aug 2007*  **ABC Group Fuel Systems- Gallatin, TN**  Responsible for new equipment and line setup and support, Pokka-yoke design and implementation, new process design and continuous improvement. Maintain plant's robotic industrial vision systems for accurate testing of each fuel tank.  Work with part designers to investigate new ways of producing fuel tanks. Working with Fanuc Robots for automation of the plant's processes. PLC and HMI programming for improving current machines. |
| **Skills** | **Software Experience**:  **Cad**: AutoCAD, Inventor, Solidworks  **Programming Languages:** Visual Basic, C#, HTML, SQL, Python, Pascal, Rapid  **PLC/Motion Control**: Allen-Bradley, Siemens, Keyence, Mitsubishi, and Omron PLC's, RSView, Keyence VT Studio, WAGO I/0, VISLOC and Cognex Vision Systems, Yaskawa, Keyence, Sanyo Denki, Siemens, Allen-Bradley Servo Controllers.  **Robot**: Fanuc, ABB, MotoMan, and Kawasaki Robots    **Technical Skills**: Experienced in CNC and Manual Machining, TIG welding, MIG Welding, Arc Welding, Casting, Plant Layout, Motion and Time Studies, Cost Analysis, Rapid Prototyping |
| **Other** | **Publishing**: I. Fidan, A. McGough, J. Foote, "The Development Stages of Rear Upright for Formula Car," CD Proceedings Volume #3 of IMECE 2004 - 2004 ASME International Mechanical Engineering Congress, Anaheim, CA, November 13-19, 2004. |

***References will be provided upon Request.***