

OBJECTIVE

Join a progressive Engineering Team where I may apply my product development and machining, assembly, material handling experience gained from working with Fortune 25 Corporations. I am a customer-focused, team-oriented, Senior Mechanical Engineer with a track record of new / sustaining electro-mechanical component development and industrial equipment installation oversight. I also have a passion for automation.

PROFESSIONAL EXPERIENCE:

Provided technical leadership for hardware development and certification / validation / qualification testing onsite and at vendor facilities. Led development team meetings with vendors, worked successfully with cross-functional departments and vendors. Prepared detailed design specifications, processed engineering design changes, participated in design reviews, authored test plans and reports. Collaborated well with designers via a working knowledge of GD&T, dimensional stack-up tolerance analysis and ASME Y14.5 Drawing Standards. Provided technical leadership for manufacturing support and robotic / automated material handling equipment installations. Developed electro-mechanical and hydraulic products. Directed environmental and structural testing.

Belcan Engineering Group, LLC. Senior Mechanical Engineer**June 2002 to May 2020****Electro-Mechanical Component Design Development and Testing**

- Developed multiple electro-mechanical jet engine sensors and structural components, many critical to engine control for military and commercial jet engine applications.
- Developed components through multiple design phases including: concept, preliminary design review, detail design review, prototype development/testing and certification testing.
- Components include: structural components, oil level & temperature sensors, accelerometers, vibration detection unit, low noise accelerometer cables and component cooling fan.
- Ensured successful on-site certification testing at multiple supplier facilities in multiple cities.

Robust Six Sigma Scoring Process for Jet Engine Scrap Reduction

- Led team using "Six Sigma" quality methods to create process capability models / procedure which processed 10,000 drawing characteristics resulting in savings of ~\$1,000,000 by reducing scrap due to unnecessarily tight manufacturing tolerances.

General Motors Corporation / Delphi Automotive Systems**July 1980 to February 2001****Senior Project Engineer / Project Engineer**

Experience includes electro-mechanical and hydraulic brake product design/development, responsible for casting and machined component design, experienced with GD&T; testing; warranty cost reduction; quality and federal motor vehicle safety standards.

- Developed more than 60 automotive brake components and product assemblies for high volume domestic production and for the "Popular Science Magazine" Automotive Technology award-winning "ABS-VI" Antilock Braking System Assembly used in asian/pacific/european automotive applications while meeting or exceeding customer expectation.
- Developed components through multiple design phases including: preliminary design review, prototype development testing, validation testing and introduction to production.
- Utilized DOE testing methods to validate design changes to new and existing products.
- Analyzed vehicles warranty data by statistical methods and implemented irreversible corrective actions which reduced warranty costs by ~ \$12,000,000 per year.

Associate Engineering – Plant Engineering

Experience includes customer interface, manufacturing, robotic / automated material handling equipment installation

- Supervised painters and moving team for \$8 million renovation project which relocated 400 employees to new 60,000 sq. ft. office building and renovated office spaces which increased collaboration and efficiency an estimated 30%.
- Provided technical engineering leadership to shop trades personnel to support supply chain for machining, assembly and material handling installations.
- Collaborated with pump supplier to correct industrial coolant pump operating pressures which eliminated premature pump failures which saved the department ~ \$100,000 per year.
- Designed robotic material handling system for plater load / unload operation for college thesis requirement.

EDUCATION: B.S.M.E., Bachelor of Science, Mechanical Engineering Kettering University**SKILLS:** Effective communication, team oriented, custom focused, integrity, organized, honest, positive.
Regular participation in training in order to keep my skills current.**CLEARANCES:** United States DoD Secret Security Clearance