



PROFESSIONAL SUMMARY

Highly-motivated Mechanical Project Engineer Graduate with 3 years of work experience. Experience in project management, design, reliability development, troubleshooting, data analysis, experimentation, and testing. Motivated maintenance professional with strong mechanical aptitude and knowledge of system operations. Strong background in reliability to identify and resolve inefficient practices. Resourceful, self-driven, and analytical with capabilities of completing multiple projects in the manufacturing, biotechnology and robotic industries. Effective team member; able to feed the team with the positive knowledge to achieve the desired goals. Looking for a new challenging opportunity to learn and excel, as well as transfer my skills and knowledge.

SKILLS

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| • FMEA & failure analysis | • FEA, ANSYS, CFD/CFX |
| • Root Cause Analysis (RCA) for reliability reporting | • Testing and calibrating sensors |
| • Troubleshooting & repair of equipment | • Mechanical Assembly |
| • Maintenance scheduling (Predictive & Preventive) | • Design for Manufacturing (DFM) and GD&T |
| • AutoCAD, SolidWorks, Autodesk Fusion 360 and Creo Parametric | • Understanding of mechanical & electrical Schematics |
| • Data acquisition & statistical analysis | • Microsoft Suite (Word, Outlook, Access, Excel, & |
| • PowerPoint) | • MatLab, & Weibull trained |
| • C++, C, Python & Visual Basic Programming | • Ability To Manage |
| • Test Procedures | • Manufacturing Processes |
| • Technical Reports | • New Product Development |
| • Project Management, Microsoft Project Tracker | • Organizational Skills. |
| • Fuel Systems | • Production Support |

EXPERIENCE

Mechanical Project Engineer, Design Filtration Microzone, Apr 2019 - Current, Ottawa, Ontario

- Projected Scope development working directly with clients.
- Fielded engineering and mechanical equipment inspections.
- Managed progress of projects relative to established plans, schedules and budgets.
- Supported maintenance personnel during equipment overhauls and unscheduled outages.
- Generated work plans and coordinate activities with product development teams.
- Executed small to mid-size projects from inception to handover.
- Planned projects and executed to plan with attention to detail.
- Developed validation plans for designed systems and supplier parts.
- Provided expert forensic analysis to clients on array of engineering projects.
- Reviewed building designs and monitors progress of projects.
- Supported construction manager, quality manager and design leads.
- Created and maintained concise instructional manuals.
- Developed technical content for analysis and design reports.
- Assisted Project engineering department in quoting process.
- Maintained frequent and clear communication with customers over course of project.
- Prepared technical response to bids, presentation materials and reports to high standard.
- Provided engineering support and field direction during construction.
- Assigned tasks to and coordinated work with engineers, designers and administrative staff.
- Delivered professional presentations, developed client relationships and promote self to client groups.
- Defined and established technical approach to meet assigned objectives.
- Reported progress in meeting customer requirements periodically.
- Proposed improvements to enhance design and manufacturing processes.
- Coordinated shipment, installation and final acceptance of system at customer site.
- Interacted with vendors and support project coordination.
- Provided mentorship to Junior Engineers and Interns.
- Generated build and assembly documentation, interface control documentation, test plans and procedures.
- Supported equipment reliability effort with detailed theoretical and practical failure analysis and solutions.
- Met deadlines and showed strong self-motivation and initiative.
- Owned all aspects of mechanical design for products under control.
- Supported Program Management office on engineering labor estimates, schedule and procurement activities.
- Developed, updated and maintained detailed project plans and schedules using Microsoft Project.
- Supported system testing, trouble shooting and problem resolution.
- Created detail designs using 2D and 3D drafting including dimensioning and tolerancing.
- Performed static and dynamic structural analysis using finite element analysis tools.

- Managed mid to large size projects to schedule and budget.
- Participated in Kick Off Meetings, Design Review Meetings, Factory Acceptance Tests.
- Developed products and systems from initial concept to production ready state.
- Projected engineering using Microsoft Office, statistical programs and Microsoft Project.
- Managed resolution of technical issues including root cause analysis.
- Provided technical support during manufacturing and assembly of prototypes.
- Selected equipment and fixtures for use in building.
- Performed Root Cause Analysis of systems and subsystems within manufacturing environment.
- Performed mechanical analysis including Statics and Dynamics, Finite Element Modeling and Material Properties.
- Applied advanced engineering knowledge to projects.
- Developed static and dynamic design and analysis of mechanical systems, equipment and packages.
- Applied knowledge of material properties, machine components, statics and dynamics.
- Developed mechanical equipment systems and planned maintenance activities.
- Verified quantities and accuracy of design release.
- Prepared purchase and test specifications for electro-mechanical and optical components and subsystems.
- Interpreted drawings, specifications, work instructions and rough sketches to design layouts.
- Developed and maintained standard processes and training documents for production line.
- Assured system and product quality by designing testing methods.
- Created schedules and manage actions to meet milestones.
- Managed engineering team's effort and time within budget and schedule provided for task.
- Worked to achieve company goals, including productivity and safety.
- Provided technical assistance in appropriate manufacturing and inspection areas.
- Evaluated product design and requirements to develop and document assembly processes and procedures.
- Presented and participated at marketing meetings, conferences, bids and proposals.
- Evaluated ability of products to meet performance standards and specifications.
- Provided Quality Assurance for ongoing construction project.
- Resolved team conflict and motivated to achieve goals.
- Provided technical findings and conclusions in laymen's terms, both verbally and in writing.
- Checked all design work for accuracy before release.
- Prepared bid sheets and contracts for construction and facilities acquisition.
- Identified technical problems and provided innovative and creative solutions.
- Worked directly with China Suppliers on product validation.

Junior Mechanical Engineer – Product Designer, ICOR Technology, Nov 2018 - Apr 2019,
Ottawa, ON

- Created complex mechanical components and assemblies using SolidWorks.
- Accomplished CAD drawings revision control, BOM updates, and machine shop drawing requirements for newly engineered components through SolidWorks.
- Managed all phases of the design process for a multitude of new and improved robotic components, parts, assemblies and subassemblies, including drafting, dimensioning, tolerancing, prototyping, integration, testing, documenting and releasing into production.
- Designed tests to confirm accuracy of FEA models of composite robotic components.
- Collaborated with engineers and millwrights to provide hands-on technical support to discuss existing and potential improvement engineering projects.
- Experienced with designing enclosures for PCB, Ethernet Switch, and System Computer boards.
- Monitored inventory database through Maximo to keep track of company inventory.
- Assisted quality control in measuring the crossovers thread sizes, external & internal diameters, by the use of Vernier calipers, made to the required accuracy by the customer.
- Collaborated with mechanical engineers to resolve production line development and maintenance issues while maintaining the preventive maintenance tasks.

Sales Engineer and Maintenance, High Tech, Projects & Trading, May 2018 - Oct 2018, Cairo, Egypt Egypt

- Prepared and delivered technical presentations explain medical devices and products of multinational companies such as Enraf-Nonius, B. Braun, Mediprema, Storz Medical, and BenQ to customers.
- Modified products to meet customer needs, secured orders and arranged delivery.
- Responded to breakdowns, diagnosing faults, repairing equipment, and managing budgets.
- Ensured compliance with health and safety legislation.
- Mined data through Oracle and Microsoft Access to uncover insights and identify fleet system failure trends and components inflection point.
- Exposed to the inspection procedure of medical devices testing and providing detailed technical reports discussing the faults and repair method with maintenance engineer.
- Experienced around medical equipment and rehabilitation for maintenance tasks as well as performed preventive plans for reduced breakdown maintenance as continuous improvement.
- Implemented and collected vibration and ultrasound data for statistical analysis to observe failure trends on critical assets on the production line as part of condition monitoring predictive maintenance.
- Performed RCA and FMEA for failed production line equipment to determine the criticality of the assets and contacted OEM/Vendors to educate customers on available failures solutions and propose either component modifications or procedures for further component/system reliability.
- Investigated and aligned metrics for Failure Reporting and Corrective Action System (FRACAS) discrepancies between company and customers.
- Performed statistical analysis through Weibull for multiple fleet components as per

action database requests.

- Collaborated with In-Service-Engineering and Sales personnel to provide the necessary analysis and reporting for pre-sale and after-sale of the product Capstone Project.

EDUCATION

Bachelor of Engineering, Biomedical and Mechanical
Carleton University - Ottawa, ON, Canada

Jun 2018