



TECHNICAL EXPERTISE:

- Human skills development through engaged instruction, research, and practice.
- Functional & Cross Functional Management, Organizational Development.
- Manufacturing design & analysis targeting single piece flow, utilizing Lean, SPC, CIP & 5S.
- New Product Development & Technology Portfolio Management.
- Electro-Mechanical analysis, synthesis & application design.
- Product Design utilizing Solidworks, FEA, DFM, & DFMEA.

EXPERIENCE:

- COLLEGE OF WESTERN IDAHO:** Nampa, ID Fall-13 to Current
 Assistant Professor - Drafting Technology Fall-19 to Current
- As Program Chair role became obsolete, have continued to manage the Drafting Technical Advisory Committee and budget.
 - Coordinated and executed program changes to simplify class structures by including lab and class contact hours into combined courses.
 - Purchased Lidar laser scanner, initiated data collection and utilization into construction related design courses.
 - Purchased laser cutter and initiated into architectural design courses.
- Program Chair - Drafting Technology Fall-16 to Spring-18
- Taught physics, applied math, civil design, machine design, structural design courses.
 - Work with local industry and technical advisory committee to improve curriculum.
 - Implement metrics that balanced student knowledge outcomes, software skills, and career preparation for the drafting cohort. As a result introduced and taught new HVAC design and electrical and plumbing design courses.
 - Initiated class consulting projects working for industry. Classes have earned \$10,000.
- Instructor - Drafting Technology Fall-13 to Spring-15
- Taught manual drafting, mfg & materials, physics, applied math, civil design, machine design, structural design, and career capstone courses.
 - Initiated 3D printing into course curriculums to advance student understanding of fits and tolerances.
 - Initiated coordinated class projects to replicate complex real world design environment.
- BOISE STATE UNIVERSITY:** Boise, ID Spring-17 to Fall 2018
 Adjunct Instructor - Civil Engineering
- Requested by BSU to introduce an AutoCad class for Civil Engineers. Developed a course curriculum including design and analysis utilizing AutoCAD, Civil 3D and Revit software.
 - Taught class for five semesters, introducing Finite Element and Cut & Fill Analysis topics into the C.E. program, earning excellent student evaluations each semester.

PROTEAM: Boise, ID

Oct-07 to Jul-11

Engineering Director

- Implemented phase gate NPD discipline in a small private company atmosphere. Industry leading new products drove revenue growth through the 2009 recession. Products launched in 2010 achieved 14% of sales by 2011. Phase gate usage reduced warranty issues by 45%.
- Put traction to cost reductions yielding 15% product cost reduction.
- Participated on the core sales team put together to sell the ProTeam company. Ultimately Emerson Electric purchased ProTeam in 2009.

ROBERT BOSCH TOOL CORPORATION: Chicago, IL

Jun-98 to Jun-07

Added Skil brand Engineering Director responsibility

May-04 to Jun-07

- Managed 27 associates and \$3.5MM expense budget for the Skil brand while maintaining responsibility for the Shared Services.
- Partner Develop and maintain a Skil brand 3 year product plan with Marketing and develop 5 year technology roadmap.
- Delivered new product launches on time, within cost, at a defined quality level. Initiated predevelopment activities to increase new product launches from 6 to 18 per year.
- Reorganized the Skil engineering department around 3 key product segments and utilized the Bosch proprietary phase gate PDP processes to achieve productivity improvements.

Engineering Director, Shared Services,

Oct-02 to Jun-07

- Lead electrical engineering, advanced development, model shop, and CAD infrastructure.
- Innovations lead included digital display rip fence, world's first LiIon power tool, and table saw flesh detecting technology. Engineering development included motor design, switch design, and electrical tool features.
- Managed 24 engineers, and a \$3MM expense budget.
- Improved productivity by 30% and costs by 10% utilizing Lean in an office environment.
- Developed relationship with University of Glasgow to customize motor design software.
- Planned and moved engineering documentation work to India.

Project Leader

May-98 to Oct-02

- Led a team of 5 development engineers 5 engineers, managed a \$1MM engineering expense budget, and \$4MM project capital budget.
- The team launched 16 new power tools over four years. Defined the product roadmap for the Skil brand for a seven year period. One project involved retooling an automated focus factory over a 72 hour period.
- Participated in developing a proprietary Bosch New Product Development Process. Process implementation and tracking reduced average schedule slip from 14 weeks to 4 days.

ROBERT BOSCH TOOL CORPORATION: Heber Springs, AR

Manufacturing Engineering Supervisor Feb-93 to May-98

- Worked in a high volume vertically integrated factory manufacturing Skilsaws. Managed four engineers. Utilized Design of Experiments, SPC, Kaizen, CIP, torture testing, PFMEA, Visual Management, 5S, and other leading manufacturing tools to deliver results.
- Lead the implementation of a Bosch proprietary Continuous Improvement Process. Improved costs by over \$1MM per year. Improved motor manufacturing capacity by 20% utilizing Kaizen based methods.

PRIOR WORK:

TECHNAVISON: San Diego, CA Apr-91 to Jan-93

- Project Engineer for design of cast ophthalmic lense blanks for the eyeglass industry.
- Innovated ophthalmic lens molds from glass to steel to reduce costs by 60%, as well as reducing manufacturing time from weeks to days.

SUTTER CORPORATION: San Diego, CA Jul-88 to Apr-91

- Engineering Supervisor for development of electro-mechanical orthopedic rehabilitation devices and artificial phalangeal joints.
- Multiple patents for orthopedic rehab innovations.

STILLMAN SEAL: San Diego, CA Jun-84 to Jul-88

- Design engineer for metal backed seals and other custom rubber molded products and tooling.
- Utilized vibration analysis techniques to develop a multi-million dollar business designing vibration isolators for the aerospace industry.

EDUCATION:BSME, Iowa State University at Ames May-84
Research Assistant in near field acoustic vibration,
focused on forcing-response function algorithm & testing

California Professional Engineers license, #M26694 Jan-90

MBA course work, University of Central Arkansas 1996-1998
acctg, fin, mkt, ops mgt, business comm.Idaho Teacher Certification course work, Idaho State 2014-2015
Instruction Methods, CTE History,
Curriculum Development Measurement & Evaluation.