
EDUCATION

- 2006 **Masters of Science, Mechanical Engineering**
Concentration in Precision Machine Design
San Jose State University, San Jose, California
- 2001 **Bachelor of Science, Mechanical Engineering**
Concentration in Mechanical Design
San Jose State University, San Jose, California

EXPERIENCE

- June 2016
to Present **Engineering Design & Testing Corp.**
Concord, California
Consulting Engineer
Specialized consulting in the areas of mechanical systems, finite element analysis, fracture mechanics, and machine design. Root cause investigation and analysis of mechanical damage to equipment, components, and materials, including fracture analysis and failure analysis. Preparation of repair and replace cost estimates. Investigation of incidents involving residential, industrial and commercial systems. Damage evaluation and assessment.
- April 2002
to May 2016 **Aptech Engineering Services, Inc. (Intertek)**
Sunnyvale, California
Consulting Engineer
Engineering services for the power, oil and gas industries. Piping design and analysis, fatigue and fracture mechanics, welding residual stress analysis, finite element analysis, ASME boiler and pressure vessel code, API 579/ASME fitness for service assessments, software programming, and various project management roles. Management of nuclear engineering quality control and pulsed eddy current technique and services expert.
- February 2001
to November 2001 **Smart Products, Inc.**
San Jose, California
Mechanical Engineer/ Quality Control Manager
Management of quality department overseeing the production of precision injection molded valves used in a variety of devices from surgical lasers to soda machines. Custom precision valve spring design, CNC machining and programming, CAD component design and training, and clean room design.

REGISTRATIONS and CERTIFICATIONS

- Registered Professional Engineer in Alberta (#235929)
Registered Professional Engineer in Arizona (#62906)
Registered Professional Engineer in California (#36096)

Registered Professional Engineer in Colorado (#0052085)
Registered Professional Engineer in Hawaii (#17179)
Registered Professional Engineer in Nevada (#024310)
Registered Professional Engineer in Oregon (#91546)
Registered Professional Engineer in Texas (#118062)
Certified Fire and Explosion Investigator (CFEI #21589-12250)
National Council of Examiners for Engineering and Surveying Record (#57459)
FAA Part 107 Commercial Drone Pilot
Liquid Dye Penetrant
Magnetic Particle
Niton X-Ray Fluorescence Analyzer
Private Pilot - Airplane Single-Engine Land
Pulsed Eddy Current

PROFESSIONAL ORGANIZATIONS

American Society for Metals International (ASM)
American Society of Mechanical Engineers (ASME)
Design and Analysis Fracture Mechanics 2014 Session Chairman, ASME PVP Conference
Failure Analysis Society (FAS)
National Association of Fire Investigators (NAFI)
National Fire Protection Association (NFPA)
Professional Aviation Maintenance Association (PAMA)
SAE International (SAE)
Society of Naval Architects and Marine Engineers (SNAME)

PUBLICATIONS

"Detection of Incipient SCC Damage in Primary Loop Piping Using Fiber Optic Strain Gages," EPRI report 3002003219, June 2014
"Evaluation of the Pulsed Eddy Current Inspection Technique Known as the Through-Fin Inspection System for Heat Recovery Steam Generators (T-FISH) as Applicable to Power Plants," EPRI report 1018987, December 2009
"Optimization of NDE Reexamination Locations and Intervals for Grade 91 Piping System Girth Welds," ASME paper PVP2015-45630, July 2015

PRESENTATIONS

Example Use of Failure Assessment and Tolerable Diagrams in the Evaluation of Components Containing Crack-like Flaws, MS&T Conference, Pittsburgh, PA, October 2017
Pulsed Eddy Current - Webinar Series, Intertek-APTECH, Sunnyvale, CA, 2010-2016

Pulsed Eddy Current Examination and Application, The Siam Group, Kanchanaburi, Thailand, February 2013

Pulsed Eddy Current Non-Destructive Testing for FAC and General Area Wall Loss, IPEIA Conference, Banff, Alberta, Canada, February 2014

Pulsed Eddy Current Non-Destructive Testing for FAC, Fossil FAC International Conference, Washington, D.C., March 2013

CONTINUING EDUCATION

- 2016 *ASM Principles of Failure Analysis* - Online Course (2016)
 Dye Penetrant Inspection, Intertek, Santa Clara CA, 2016
 Magnetic Particle Inspection, Intertek, Santa Clara CA, 2016
 OSHA Confined Space Training – Online Course (2016)
- 2013 *Fracture Mechanics Approach to Life Predictions*, Las Vegas, NV, 2013
- 2011 *Flow Accelerated Corrosion*, Charlotte, NC, 2011
- 2010 *Pulsed Eddy Current Training*, A-Plus RTD, Houston TX, 2010
- 2006 *ANSYS Finite Element Analysis*, Ozen Engineering Inc., Sunnyvale CA, 2006
- 2003 *Niton X-Ray Florescence Analysis*, ThermoFisher Scientific, Oakland CA, 2003