Joseph Eisinger Mechanical Engineer, MSc, PE

joe@josepheisinger.com • (303) 880-1732 • Hamden, CT 06514 • josepheisinger.com

EDUCATION

Colorado School of Mines • Golden, CO • Bachelor of Science, May 2009

- Mechanical Engineering, GPA 3.9, Summa Cum Laude

 Varsity Track and Cross Country
- University of Colorado Boulder, CO Master of Science, May 2010
- Mechanical Engineering, Focus in Energy and Environment, GPA 3.9

WORK EXPERIENCE

Lex Products • Mechanical Design Engineer

Shelton, CT • December 2015 – Present

- Generated patentable designs that cut assembly time by over 50% and completed all engineering details, drawing packages, and design documentation. Designed to UL standards and applicable regulations.
- Managed projects that bring impactful products to market in short(weeks) development cycles, through stage gate and nimble product development frameworks.
- Coordinated with customers and with suppliers to identify needs and capabilities, identify the solution space, and execute the most cost effective path to market.

Abengoa Solar • Mechanical Design Engineer

Lakewood, CO • June 2010 – November 2015

- Patented mechanical structures and solar components (WO2012145513 A3 and WO2014078205 A1).
- Developed innovative and cost-reducing parabolic trough technology as part of Department of Energy grant, leading to 50% reduction in solar field cost.
- Took leadership and support roles to develop revolutionary solar technology by identifying opportunities, brainstorming, performing initial engineering calculations, computer analysis, detailed design (Autodesk Inventor), prototype fabrication, testing, design iteration, documentation, and presentations.
- Supervised university partnerships and interns. Coordinated drafting work with contract drafters.
- Designed complex and high tolerance assemblies for manufacturing including tolerance analysis and optimizing for assembly slashing assembly time by over 50%.
- Created PLC algorithm for solar tracking of heliostats. Implemented precise position control of brushed DC motor via magnetic sensor enabling 60% cost reduction in heliostat drives.
- Managed project to fabricate components by automated robotic assembly. Organized suppliers and contractors for component testing.
- Performed quality assurance of key assembly components by working with vendors at their facilities.
 Implemented check fixtures and inspected parts and assemblies with CMM and Photogrammetry.

Syncroness • Mechanical Engineer Intern

Westminster, CO • June 2009-August 2009

- Developed innovative product designs for medical and aerospace industries; engineered from start to finish.
- Created system models, CAD models (SolidWorks), and engineering documentation.

ENGINEERING SKILLS

- Open-Ended Problem-Solving: Worked on and led components of government sponsored projects to identify and develop innovative and inventive solutions to improve solar field cost/performance quotients.
- Engineering breadth: Experience with GD&T, FEA, injection molding, sheet metal, stamping, weldments.
- Electronics Engineering: Designed, chemically etched, and assembled circuit boards for radios, cnc machines, and motor drivers.
- Mechanical Aptitude: Creative, active tinkerer/hands-on skills: woodworking, built a go-kart, TiVo, bicycle
 generator, composite panel desk, photobooth, mechatronic jack-o-lantern from scratch.
- Computers: Microsoft Office, TRNSYS, NASTRAN, CAD: AutoDesk Inventor, SolidWorks and COSMOSWorks. Windows and Linux operating systems and programming skills in C, C++, FORTRAN, and Python.
- Volunteering: Directed a dedicated volunteer team to host annual 5k road race to raise money for local school, increasing revenues for 5 straight years