

# JESSICA CLAIRE

- ✉ resumesample@example.com
- ☎ (555) 432-1000
- 📍 Montgomery Street, San Francisco, CA 94105

## SKILLS

- Fluent in PTC Creo, SolidWorks, ANSYS, PTC Windchill, Teamcenter
- Project Management
- Research & Development
- Geometric dimensioning and tolerancing
- Drawings standards compliance
- Data collection and analysis
- Testing and troubleshooting
- Blueprint design
- Manufacturing process controls
- FEA and failure analysis
- SharePoint
- Lean principles knowledge
- Multidisciplinary exposure

## EDUCATION

University of Illinois At Chicago  
Chicago, IL • 05/2018

*Master of Science:* Mechanical Engineering

- Graduated with 3.77 GPA
- Received Dean of Students Leadership Award and UIC Chancellor's Student Service and Leadership Award.
- Majored in Design, Finite Element Analysis, Product Development
- Elected to Vice President for UIC Graduate Student Council in 2017-18.
- Coursework in Finite Element Analysis, Design of Micro-systems and Product Development

University of Pune  
Pune, Maharashtra, India • 05/2015

*Bachelor of Science:* Mechanical Engineering

- Coursework in Mechanical Design, Dynamics of Machinery and CAD.
- Member of ISHRAE, ISME
- Thesis: Design of Thermo-acoustic engine

## CERTIFICATIONS

Six Sigma Green Belt Certification, Council of Six Sigma, USA (Ongoing)  
Certified SolidWorks Professional (CSWP), USA (Ongoing)  
Diploma in Product Design and Analysis, India (Mar 2016)

## PROFESSIONAL SUMMARY

Mechanical Design Engineer with 2+ years of experience in CAD modeling and product development. Collaborative team player with proven track record of delivering multiple, concurrent projects in fast-paced environments. Drives production efficiency through qualitative analysis and process redesign.

## LINKS

- <https://www.linkedin.com/in/Jessica-Claire/>

## WORK HISTORY

Partners Healthcare System - 3D Designer/Modeler  
Concord, MA • 05/2019 - 02/2020

- Worked on-site at ENERPAC doing contract work assignments with Caterpillar Inc.
- Provided technical engineering support and project management for design, engineering and development of mechanical products.
- Modified Bills of Materials (BOM) and certifications through Windchill. Generated engineering change notices (ECNs) for any changes to maintain design consistency and accuracy for both client and supplier needs.
- Re-created CAD drawings using PTC Creo to convey manufacturing and production configurations with modifications.
- Maintained an on-going list of product assemblies and parts with design specs and, tracked design/print changes in Excel worksheets. Managed design process documentations.
- Addressed client issues related to design, assembly or associated projects under minimal supervision of an on-site supervisor.

Ametek, Inc. - Research Assistant  
Richmond, CA • 05/2018 - 05/2019

- Worked with the department of mechanical engineering regarding the ergonomics and human factor project on development of EEG circuit for detection of spatial disorientation in the pilots.
- Developed macros, special formulas and other actions to produce reliable and consistent statistical reviews.
- Conceptualized and designed a 3D model of Human Machine Interface (HMI) helmet for a pilot using SolidWorks, which would be used for developing a working prototype in the next phase of the project.

Ultra Electronics 3Eti - Product Development Engineer  
Austin, TX • 05/2017 - 08/2017

- Researched and recommended improvements to product development plans.
- Worked with marketing and service managers to understand customer desires and obtain feedback.
- Determined project costs, timelines and limiting factors.
- Applied concepts of GD&T and FMEA during the design process to obtain a superior product.
- Used PTC Creo and SolidWorks to re-design, develop concepts for dashboard components as per customer needs.
- Recorded data, analyzed test results and prepared experience maps with possible scenarios based on the findings
- Developed team communications and information for brainstorming sessions.

Caterpillar Inc - Mechanical Design Engineer  
City, STATE • 08/2016 - 05/2017

- Researched production processes, environmental reports, facts, permits and, laws pertaining to specific cases.
- Coordinated project scheduling, planning, and management.
- Developed a concept to connect strategically with localize businesses to increase profits and acquire customer base.
- Designed new product concepts and created improved iterations of existing products for safety and quality using SolidWorks and ANSYS WorkBench for concept designs.
- Applied concepts of GD&T and FMEA during the design process.
- Responsible for the feasibility study, concept development, prototype implementation and, field testing.
- Projected revenue forecast of first three years to be 27M USD and 35% increase in brand loyalty.

## ACADEMIC PROJECTS

- "Processing Magnetic Resonance Elastography (MRE) experiment" Dec 2017 Determined the complex wave images for each displacement projection and spatially filtered complex wave images. Calculated region of interest average values of storage modulus and the loss modulus for brain tissues.
- "Design of The Electrostatically Actuated MEMS Switch for RF Applications" May 2017 Studied a MEMS switch with six strip membranes to understand its working principles. Modified the MEMS switch to achieve a shorter actuation voltage range. Performed static and vibration analysis on the 3D model of the switch using SolidWorks and ANSYS WorkBench.
- "Analysis of Automobile Steering System" Dec 2016 Applied the knowledge to understand the working principle of an automobile steering system. Performed a static structural and dynamic analysis on the automobile steering system using ANSYS Workbench.
- "Design of Thermoacoustic Engine" May 2015 Developed a thermoacoustic engine, which comprised of different parts- regenerator, heat-pump, and heat-exchangers. Designed a 3D CAD model of the engine in CATIA and performed for system analysis.