PARTH THEKDI

(704) 907 1090
Charlotte, NC 28262 (US Resident)
thekdiparth10@gmail.com
https://www.linkedin.com/in/parththekdi/
https://sites.google.com/view/parth-thekdi/home

PROFESSIONAL SUMMARY

Mechanical engineer with two years of research experience in design and analysis. Hands-on experience on Abaqus, SolidWorks, AutoCAD, MATLAB, Python.

EDUCATION

Master of Science in Mechanical Engineering **Aug 2017- June 2019**
The University of North Carolina at Charlotte, Charlotte, NC **(GPA: 3.88/4.0)**
Bachelor of Engineering in Mechanical Engineering **July 2012 - May 2016**
Gujarat Technological University (India) approved by AICTE **(GPA: 3.60/4.0)**

RELATED COURSEWORK

- Finite Element Analysis & Application | Computational Methods in Engineering | Theory of Elasticity | Computational Plasticity | Vibration of Systems | Machine Design | Advance Manufacturing Processes | Lean Six Sigma |

SOFTWARE SKILLS

- **Design and Analysis:** Abaqus, Ansys, SolidWorks, AutoCAD, Siemens NX
- **Programming:** MATLAB, Simulink, Minitab, Python
- **Computer skills:** MS Word, MS Excel, MS PowerPoint, Latex, Beamer
- **Professional Certificates:** Geometric Dimension & Tolerance (GD&T) Training: ASME Y14.5 Standard
  AutoCAD 2014 certified

WORK EXPERIENCE

Master's thesis: Finite element studies of orthogonal machining of AISI 1045 steel **Aug 2017 - July 2019**

- A 2D Finite Element model of orthogonal machining is developed using the non-linear FE package Abaqus
- Johnson cook constitutive model, Johnson-Cook damage model, and fracture mechanics are used for determining the value fracture toughness of chip serration and chip separation for performing structural-thermal analysis on model

Graduate teaching assistant at department of MSME-UNCC **Aug 2017- May 2019**

- Collaborated with a professor in planning, preparing and organizing lecture notes
- Holding MATLAB tutorial for students also helping them with coursework, assignment, and projects

Gujarat state energy corporation limited- Mechanical intern **March 2015 - May 2015**

- Trained in areas such as boiler, turbine, coal Pulverizing and ash handling departments
- Learned various aspects of the thermal power plant departments

Hyundai motor company- Mechanical design intern **Jan 2014 - March 2014**

- Using AutoCAD design disc Brake for front-wheel drive car
- Conduct thermal analysis and contact pressure analysis on disc brake using SolidWorks

LEADERSHIP EXPERIENCE

Super 8 Motel- Associate Manager, Clemmons, NC **Sept 2016 – Aug 2019**
The Home Depot- Sales Associate in Electrical and hardware department, Clemmons, NC **Sept 2016 – Aug 2019**

PROJECT

Optimize time taken by academic advisor using Lean Six Sigma technique **Fall 2018**

- Applied DMAIC and Kaizen techniques to improve the total time taken by an academic advisor
- Applied Capability, 5 Why, and Pareto analysis in this team project

Design controller for sail and rudder of a sailboat **Spring 2018**

- Using Simulink design controller to optimize sail and rudder angle of sailboat which can ultimately maximize speed in any wind direction

Implicit Finite Difference code for composite cylindrical pressure vessel **Fall 2017**

- Written MATLAB code for thermal analysis of the concentric composite cylinder using Finite Difference methods to determine the temperature distribution, thermal flux in radial and axial direction.

Implementation of automated manual transmission [AMT] in two-Wheelers **Spring 2016**

- Designed and developed automatic gear changing mechanism as a senior design project
- Co-developed mechanism for shifting the actuation mechanism

Prototype of portable conveyer base load lifting mechanism **Fall 2016**

- Co-designed a flexible motorized conveyor system as a senior design project
- Modelled the system and computed the simulation and load analysis of the system