# Sravana Sumanth Koneru

# **EMPLOYMENT**

### QuEST Global (Siemens Energy) - Mechanical Design Engineer - Olean, New York

Aug. 2022 - Current

- Responsible for preparing detailed Models and Drawings of various components for compressors using Siemens NX integrated with Teamcenter and SAP.
- Working on creating engineering drawings using Geometric Dimensioning and Tolerancing and effectively interpreting various applicable international codes and standards along with Siemens-Energy internal standards. Applying knowledge of these standards for the detailed design of compressor components.

#### Project Engineer - Olean, New York

Aug. 2021 - Aug. 2022

- Responsible for proactive planning to schedule, analyze, coordinate and monitor assigned projects for the Siemens Energy TCP after-markets team and assure a timely flow of materials and advise any impact to the overall schedule, monitor and expedite adherence to project schedules.
- Responsible for creating manufacturing instructions and spec sheets as Part of Siemens Energy plant transition team where we were responsible for Knowledge Transfer of Manufacturing Processes for various components of Turbo Compressors and expanders, Review and update Specs in design, Manufacturing processes.

#### **Interacting Robotic Systems Laboratory** - *Graduate Student Researcher* - Stony Brook University

May 2021 - Aug. 2021

- Developed and defended a thesis on a novel method for Impedance Control Under Uncertainty about Environment Properties for a serial chain robotic manipulator which uses Screw Linear Interpolation (ScLERP) to ensure the required end effector trajectory.
- Simulated specialized experiments in MATLAB to prove the validity of the defended thesis on a 7-degree-of-freedom (DOF) robot (Baxter Arm) performing several tasks with different types of constraints.
- The method is also performed with different parameterizations for representation of the orientation of the end effector i.e. both Euler angles and unit quaternion representations.

#### SVS Engineering - Mechanical Design Engineer - Hyderabad, India

July 2017 - Dec. 2018

- Responsible for the Design, modelling and optimization of components for Vacuum Tray Dryers (VTD) and Atmospheric Tray Dryers (ATD) according to the industry standards and specifications. Used Solidworks to create 3D models and 2D drawings.
- Performed part modelling, complex assemblies and Welding operations wherever it is required. Also used GD&T and developed BOM, in accordance with project deadlines and internal procedures and standards.

# **EDUCATION**

Stony Brook University

Aug. 2019 - Aug. 2021

Master of Science Mechanical Engineering GPA: 3.6

#### Gokaraju Rangaraju Institute of Engineering and Technology

Bachelor of Technology Mechanical Engineering GPA: 3.7

Aug. 2013 - May 2017

# SKILLS

TECHNICAL SKILLS: Design for Manufacturability (DFM), Design for Assembly (DFA), Finite Element Analysis (FEA), GD&T, ANSI Y-14.5, CNC - G&M Codes, CAD, Tolerances, BOM, Technical Writing

SOFTWARE PACKAGES: Solidworks, Siemens NX, PTC Creo / Pro E, Catia V5, SAP, Abaqus, Ansys, Team Center, Globus, AutoCAD, Microsoft Projects, Microsoft Office LANGUAGES: MATLAB, C, C++, Python

# **PROJECTS**

# Impedance control at uncertainities in environment (Thesis)

Aug. 2020 - Aug. 2021

Proposed, implemented and simulated the Impedance control scheme with a moving desired frame in open serial chain robot manipulator using ScLERP as a part of <u>Masters Thesis</u>.

ScLERP Motion Planner Jan. 2020 - May 2020

Implemented a <u>ScLERP based motion planner</u> for serial chain manipulator and simulated in a Baxter Robot Arm in MATLAB.

#### **Doo Sabin Subdivision Scheme**

Jan. 2020 - May 2020

 $Created\ a\ \underline{GUI\ based\ application}\ using\ C++\ to\ implement\ a\ novel\ interpolating\ subdivision\ scheme\ based\ on\ Doo-Sabin\ Subdivision\ scheme\ on\ 3D\ meshes.$ 

#### Finite Element Analysis of Fracture Specimen

Jan. 2020 - May 2020

Finite Element Analysis is carried out on a standard ASTM compact fracture specimen using ABAQUS to study its fracture mechanics.

# Structural Analysis of Various components using MATLAB

Aug. 2020 - Dec. 2020

Created a MATLAB code, which can perform structural analysis on any given truss of 2D element when provided with the coordinates of the specimen.

# Powered Exoskeleton Arm

Jan. 2017 - May 2017

A exoskeleton arm with pneumatic systems to assist people with limited limb functionality or to help lift more weights is modelled ,fabricated and tested at various conditions.

#### Maintenance of Boilers (Rotating Machines and Pressure Parts)

Dec. 2015 - Dec. 2015

Worked as a part of a project team at National Thermal Power Corporation (NTPC), which made a profound study on functioning, performance, and maintenance of boilers (pressure parts and Rotating machines).