

**MATHALA SREERAMA MURTHY**

**CAD/CAE Engineer.**

**Email:-** [murthymatala@gmail.com](mailto:murthymatala@gmail.com)

**Mobile no :-** 8688919011

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### **CAREER OBJECTIVE:**

To secure a responsible career opportunity to fully utilize my training and skills, while making a significant contribution to the success of the organization.

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### **PROFESSIONAL SUMMARY:**

A result-oriented CAD/CAE engineer with **3.5+** years of industrial experience in the design and analysis of underwater vehicles and mechanical components, with an ability to apply CAE skills effectively to evaluate the performance of components and optimize their designs.

- Efficient in **3D modelling** using CATIA V5, SOLID WORKS, Autodesk Inventor and Pro E Software
- Experienced in **manufacturing drawings** using AutoCAD along with interpretation of GD&T
- Proficient in **FEA Analysis** which includes ICEM CFD, static, dynamic, thermal optimization of models, mesh optimization & convergence for linear/non-linear models & isotropic materials

Looked after major maintenance activities in Steel Melting Shop (SMS) of RINL, thereby reducing the ideal time of machines and improving efficiency.

Also monitored Continuous Casting Machine (CMM) at SMS, pressure valves and other mechanical rolling systems for accurate production.

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### **TECHNICAL SKILLS:**

<b>Design Tools</b>	: Auto CAD, CATIA, CREO, Solid Works, Autodesk Inventor, PRO-E .
<b>CAE/FEA Tools</b>	: ANSYS Workbench, Static structural, fluent, icem CFD

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### **EDUCATIONAL QUALIFICATIONS:**

- **Bachelor of Technology in Mechanical Engineering**  
Viswanadha Institute of Technology and Management, Visakhapatnam, A.P  
June 2014 - May 2017      Percentage: 70
- **Diploma in Mechanical Engineering**  
Bhaskara Polytechnic, Bobbili, A.P  
June 2011 – May 2014      Percentage: 72.18
- **AP Secondary school certificate (AP SSC)**  
Z.P.High School, Visakhapatnam, Andhra Pradesh  
June 2011      Percentage: 80

## **WORK EXPERIENCE:**

### **PROJECT -2 : SHIP HULL – FLUENT ANALYSIS**

Worked at Naval Science and Technological Laboratory (NSTL), DRDO under SYMBIOSYS TECHNOLOGIES PVT.LTD from 15<sup>th</sup> August 2021 to till date.

- Meshing done with using Ansys ICEM tool by calculating the edge parameters
- Understands the various turbulence models and their best use cases
- Setting the optimum computational procedure to analyse given physics.
- Fluid domain extraction, geometry clean up, meshing, quality check.
- Boundary conditions, solver settings, preparing case files.
- Models validation based on real time data.
- monitoring convergence of both steady state and transient simulations. Generate reports, specifications, memos, and sketches of the obtained CFD results

### **PROJECT -1 : UNDER WATER VEHICLE**

Worked at Naval Science and Technological Laboratory (NSTL), DRDO under APOLLO MICRO SYSTEMS PVT.LTD since 02<sup>nd</sup> MAY, 2018 to 10<sup>th</sup> MAY, 2021 and has immensely contributed in the development of the new state-of-the-art delivery platforms for underwater vehicles, ships and propellers engaged in various stages of their development.

- Efficient in **3D modelling** using CATIA V5, SOLID WORKS, Autodesk Inventor and Pro E Software
- Generated **3D models** of ships, propellers and underwater vehicles and their sub-components by using CATIA V5, SOLID WORKS and Inventor
- Experienced in **manufacturing drawings** using AutoCAD along with interpretation of GD&T

## **ACADEMIC TRAININGS:**

- **Graduate Apprentice Trainee as Maintenance Engineer** at RINL Visakhapatnam in Steel Melting Shop (SMS-2) Department for a period of 1 year (from 4<sup>th</sup> December, 2017 to 3<sup>rd</sup> December, 2018).
- **Diploma Engineer Trainee** at Vishnu Carriers (TATA Motors Pvt. Ltd) for a period of 6 months.

## **ACADEMIC PROJECTS:**

PROJECT ACADEMIC YEAR - 2017

**Title: Design and fabrication of single plate friction clutch.**

**Description:** Reduced the frictional losses in a single plate clutch by altering the material and design of clutch plate .

## **RESPONSIBILITIES:**

- Generation of computational meshes and performing CFD analyses using standard commercial and/or governmental mesh generators and CFD codes.
- Experience in creating tetrahedral, prism and pyramid meshes for various automotive components using tools ANSA and ANSYS T-Grid.
- Modelled **Manufacturing drawings** of systems and sub-systems of a torpedo using AutoCAD along with their GD&T interpretation
- Generated **3D models** of ships, propellers and underwater vehicles and their sub-components by using CATIA V5, CREO, SOLID WORKS and Inventor

- Performed **Finite element meshing** and applied **boundary, loading conditions** using pre-processor ANSYS Workbench for several underwater vehicles and ship propellers components
- Performed **Propeller Analysis** of various ship propellers and analysed the results
- Performed **Static, Dynamic & fatigue Analysis** for under-water vehicle systems and optimized their design
- Prepared Bill of materials (BOM), **Quality Documents** for various tested components

**LANGUAGES KNOWN :**

TELUGU : Mother tongue

ENGLISH : proficiency in Reading and Writing

HINDI : proficiency in Reading and Writing

**PERSONAL PROFILE :**

**Name : Mathala Sreerama Murthy**

**Address : Visakhapatnam**

**Andhra Pradesh – 531022**

**Contact no : 8688919011**

**E- mail : [murthymatala@gmail.com](mailto:murthymatala@gmail.com)**

**Date of birth : June06, 1996**

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**Declaration:** I, **M. Sreerama Murthy** declare that the above information is correct to the best of my knowledge and belief.

**Date: 4<sup>th</sup> July 2022**

**(M. SREERAMA MURTHY)**