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| **E-mail:** | ganesh.akkar@gmail.com |
| **Mobile:** | +918600436943 |



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| **CAREER SUMMARY** |

**9 years** and **10 months** of work experience in **Finite Element Analysis** on various types of engineering structures and equipment. Experience synthesizes **Stress, Non-Linear, Thermal, Fatigue, Buckling**, **Parameterizations**, **Manual hand calculations.**

Key areas of work include,

* Design validation and verification as per company specified codes/standards using FEA and manual calculations.
* Methodology development, process improvement and process automation.
* Analyze high pressure-high temperature subsea structures for strength, stiffness and durability under design standards/codes.
* Participate in client review meetings and Tests. Resolve and respond to client queries/comments.
* Own and Drive FE Analysis requests globally. Develop and propose optimized solutions.
* Setting priorities on the go by ensuring quality deliverables and Process mapping with strong global cross functional mindset.
* Conducting and Managing update meetings of products and projects. (Accounts: Norway, Malaysia, Africa, UK)

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| **RECOGNITIONS & ACHIVEMENTS** |

* “Wall of fame” recognition from client for outstanding performance in 2016.
* Improvement Influencer of #journey improvement program.
* Bagged 36 PDU’s for “Developing and presenting Drama in project management" from Project management institute on corporate level. In role of Project manager, Actor and director through PEM.
* Deputed for international assignment to carry out critical R&D project in 2012 for 8 months.
* Secured Research fellowship at D.R.D.O. Lab.
* Received recognition for value addition and offered royalty in terms of money and job in bachelor’s project in 2008.

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| **ENGINEERING SKILL SET & STANDARD/CODE AWARENESS** | | |
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| FEA Solver  Global Riser FEA | Proficient in ABAQUS package (Implicit, standard, Python scripting, Working knowledge of AQUA), Familiar with ANSYS package (Classic with APDL, Workbench), Msc.Nastran & Msc.Patran and Casca & Fran2D/Fran2DLayer. |
| CAD & Meshing Platforms | Proficient in Solid Works and Hyper mesh |
| Applications | SAP, MathCAD, MS Project, MS Word, Excel and PowerPoint |
| Standards conversant with | ISO13628-7, Eurocode-3, ASME sect.VIII Div. II, DNV273, AISC 360, API6A. |
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| **PROFESSIONAL EXPERIENCE** | | |

**AKER Powergas Subsea Pvt Ltd. July 2014 onwards**

*Senior FEA Engineer, Product Development*

* **FCM Hub 12’’ FEA [Project: DVALIN]**

Hydrogen induced stress cracking (HISC) analysis on hub which involves Strength assessment, pretension, thermal stresses, seal setting, strains in compliance with ASME VIII and DNV.

* **Seal Leak tightness integrity analysis. (TX and BX Seal) FEA [Project: VIGDIS, R&D]**

Functional failure assessment with sensitivity analysis, result simulation with FAT. Estimated permissible contact width on seal. Developed methodology of analysis. Post processing using python script to save time.

* **Riser Lock connector 7.10 (RiserLock-NextGen) FEA [Project: R&D]**

Evaluated capacities for tension and bending, required preload to maintain integrity, fatigue capacity evaluation using sub modeling for bolts and fillets. Results simulated with on field tests & found in close proximity.

* **Suction Anchor (SA) for manifold structure** **[Project: MURPHY Malaysia, Client: Petronas]**

Foundation structure modeled using soil-structure interactions and checked for buckling of plates using Riks approach. Welds checked by manual hand calculation using Euro code 3 in MathCAD.

* **Pipeline end termination structure (PLET)** **[Project: MURPHY Malaysia, Client: Petronas]**

Analysis covered scenarios like Offshore lifting, lowering through splash zone in subsea, drop object impact, landing in subsea, ROV impact etc. Welds checked by manual hand calculations as per AISC in MathCAD.

Worked in various competency/methodology development in areas like

* Developed a standard tool by hand calculation to verify strength of connection (Joints) of each member of structure.
* Developed python scripts for thermal analysis and seal results post processing in abaqus to save time and cost associated. Motivation behind is to avoid boredom from the monotonous activity.
* Owner of processes like tips and tricks of FEA tool and convergence trouble shoot log.
* Conducted training session for new joiners on products knowledge, SAP and FEA tools.

**ONWARD technology Pvt Ltd deputed to Aker Powergas Subsea Pvt Ltd. June 2011 – June 2014**

*Finite element analyst, Product Development* (3 Years 2 months)

* **LRP/EDP Frame structure. FEA [Project: VIGDIS, Client: Statoil]**

FE model combination of beams, solid, shell and connector elements is analyzed as per DNV 2.7-3 and ISO 13628. Load cases like lifting, impact, drop and sea transport are verified. Bolts calculations as per EuroCode-3.

* **LOT and LAOT 7’’ tool FEA [Project: VIGDIS, Client: Statoil]**

Verified burst pressure capacity and thread opening criteria according to ISO 13628-7.

* **Under Hull Guide Structure (Bumper - impact) FEA [Project: VIGDIS, Client: Statoil]**

Discovered and implemented new approach to analyze bumpers subjected to impact according to respective standard/code.

**THERMAX India Pvt Ltd. April 2010 – May 2011**

*Finite element engineer, R&D Environment division* (1 Year 2 months)

Static Structural-thermal analysis of after boiler high pressure-high temperature equipment’s like Electro-Static precipitators (ESP), Bag Filter etc. using ANSYS (Workbench/Classic) software tool according to ASME VIII.

**D.R.D.O Lab, Regional Centre for Military & Airworthiness Feb. 2009 – March 2010**

*Junior research fellow (Project assistant), R&D* (1 Year 2 months)

To study dynamic behavior of wings of ASTRA missile and Patch repair technique of Aircraft structure.

**Bachelor’s Research Project:**

* Cold drawing Simulation through dies by Using ANSYS, Sponsored by Indian Seamless Metal Tube (ISMT).

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| **EDUCATIONAL QUALIFICATIONS** | | | | |
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| **Degree** | **University/Board** | **Year** | **Grade** |
| B.E. Mechanical Engineering | Pune University, India | 2008 | 61.66% |
| Diploma Mechanical Engineering | Maharashtra Board, India | 2005 | 71.08% |

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| **PERSONAL INFORMATION** | | |
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| **Nationality** | Indian |
| **Sex &** **Marital Status** | Male & Married |
| **Passport** | Valid till 2022 |
| **Language Known** | English, Hindi, Marathi |
| **Currently reside in** | Pune, Maharashtra, India |

**Relocation**: Willing to relocate as per the business need.

**Notice Period:** Negotiable.