Envelope

A persistent & keen professional with 9+ years of hands-on experience in application & validation of Hydraulic Steering systems (gearbox, pump, reservoir & columns). Proficient with customer interaction, system installation, validation (system & vehicle level), benchmarking & on-the-field troubleshooting. Worked from product creation till release, with 12 different vehicle OEMs and worked on interim projects involving NPD, change management & VA/VE. Experienced with TQM & constant contributor via Kaizen

**Trichy (Tamil Nadu), India**

**vengadarengan.s**

**+91-9600468351**

**vengadarengan.s@gmail.com**

**Vengadarengan. S**

Senior Executive (Steering System Application & Testing)

**TECHNICAL SKILLS**

CAD Modeling & Drawing

RFQ study

DMU Packaging study

Vehicle level Benchmarking

Product Proposal creation

Planning system configuration

Data Acquisition & Analysis

Vehicle level testing

Retro-fitment

Vehicle Ride & Handling

DVP & Report creation

Change management

Field troubleshooting

Cross-functional analysis

VA/VE

IATF preparation

**SOFTWARE COMPETENCY COMPETENCIES**



AutoCAD

3DVIA

SAP

Mathcad

Prosig DATS

Dewetron

PTC Creo

MS Office

**WORK EXPERIENCE**

ZF [Rane (former Rane TRW](https://ranegroup.com/rtss/),) Trichy, India *(October 2010 – Present)*

**Senior Executive, Application & Vehicle level testing** *(April* *2019 - Present)*

**Tractor (off-road) Steering Systems**

* Application study & vehicle level validation for Mahindra, Tafe, Swaraj, VST, Escorts, Captain.
* Resolve hard steering complaint in Captain, VST tractors
* Creation of service manuals using 3DVIA for all power steering gear
* Concept proving: RCB type HAPS in Agricultural tractor (Mahindra Yuvo, Swaraj 744, Tafe orchard, VST, Captain tractors)
* Achievement of the poppet pressure drop within 20 bar HAPS model.
* Steering Effort reduction in HAPS model less than 3Nm.
* Resolving the steering grunt Noise in Power steering system

**Commercial & Defence Steering Systems**

* Applicate the steering system to TML, AL, Daimler, MTBD, FML, VECV, SMLI, JBM.
* Troubleshooting pulsation issue in Daimler & AL vehicles
* Resolve hard steering complaint in Caption, VST tractors
* Creation of service manuals using 3DVIA for all power steering gear.
* Torque Study using Mathcad for all commercial vehicles.

AMESim

**Executive (System Engineering & Vehicle level testing)**, *(July* *2015 – March 2019)*

**SOFT SKILLS**

Adept customer interaction

Presentation & Brand elevation

Foster team effort

Collaborative Problem Solving

Dependability & Diplomacy

Flexibility with travel/relocation

Seasoned worker under challenging project timelines



* Design changes, calculation, drawing release & validation support for current products
* Benchmarking to identify best-in-class features & optimization
* Design of weight reduced in Steering Housing, Side cover.
* Product complaint analysis, corrective action & Implementation horizontally.
* Support for VAVE Projects.

**Deputy Executive (Current Product Engineering)**, *(July* *2013 - June2015)*

**INTERESTS**

**Test Engineer, Application & Product Testing** *(July 2010 – June 2013)*

Vehicle Ride & Handling

System Engineering & Testing

Problem solving & Complaint Analysis



* Design & prototype development of test fixtures and rig components
* Testing of Hydraulic Steering gearbox for New Product / Application projects
* Product Complaints & Failure analysis.
* System level test rig development to simulate vehicle grunt noise – faster troubleshooting
* Preventive maintenance of test rig & testing Instruments.
* Support for vehicle level testing.

**LANGUAGES KNOWN**



**Native:** Tamizh

**Other:** English, Hindi (beginner)

**EDUCATION**

Cricket, Driving, Orchard farming, Township Event Organizing

**HOBBIES**



**Diploma in Mechanical Engineering**

M.I.E.T. Polytechnic College, Trichy, India

**SSLC**

[St.](https://www.sastra.edu/) Patrick’s Higher Secondary School, Trichy