# **AVINASH DONGARE**

### Senior Manager at Tata Motors

@ avinashd.gceme@gmail.com

**3** 8378 8378 65

in avinashdongare99

### **EXPERIENCE**

### Senior Manager

#### **Tata Motors**

August 2018 - Ongoing

Pune

#### Role: System Engineer

- 1D simulations of EV powertrains for generating technical requirements for different EV aggregates e.g. electric motor, battery etc. to fulfill vehicle targets; EV range as per the standard regulations, and vehicle performance targets
- 1D simulations of hybrid electric vehicles for assessing; fuel economy over different certified and real world drive cycles, performance, and component sizing
- Mapping vehicle targets to EV aggregates, RFQ preparation, supplier selection for different components like motor and battery, and coordinating with different suppliers as a core technical person for procuring the components

#### Key Achievements

- Successfully generated technical requirements of electric motor and battery for different SCV EV powertrains
- Successfully conceived a low voltage Plug-in hybrid powertrain

#### Role: Control Strategy Architect

- Developing control strategy in MATLAB Simulink adhering to MAAB guidelines, and V & V process for control strategy development
- Calibrating and testing the developed control strategies using INCA and MDA software

#### **Key Achievements**

- Hands on experience of control strategy development for controlling xEV powertrain
- Successful implementation of "Blower control software"

### **EDUCATION**

# M.Tech. in Fluid & Thermal Engineering

**IIT Guwahati** 

**July 2016 - August 2018** 

Guwahati

CGPA - 8.4/10

Thesis: Investigation of Turbulent Multi Fluid Flow

- Developed a numerical model for simulating Turbulent multi fluid flows
- The project was sponsered by Board of Research in Nuclear Sciences

# B.E. in Mechanical Engineering

Government college of engineering Karad

**i** July 2011 - June 2015

Karad

Percentage - 73%

# LIFE PHILOSOPHY

"The secret of life is to make stepping stones out of stumbling blocks."

### **PROFILE**

- Mechanical Engineer offering nearly 4 years of experience in New Product Design and Development of Automobile Powertrains, specifically EV powertrains for delivery of Best in class products as per global standards
- Contributed remarkably as a system engineer in conceiving a low voltage plug-in hybrid powertrain for cost sensitive indian market
- Proficient in technical requirement generation for different components like motor and battery
- Skilled in control strategy development, testing, and calibration

## **ADDITIONAL SKILLS**

- Sound understanding of vehicle dynamics
- Strong interpersonal & communicational skills
- Good knowledge of NPI process
- Awareness about recent enhancements in Liion battery
- Good knowledge of regulations (AIS 040, AIS 137, CAFE norms, WLTP regulations)
- Sound knowledge of "World class Quality" standard
- Acquainted with "A2MAC1" for benchmarking of different systems & subsystems
- Ability to deliver under strict timelines
- Ability to work collaboratively as part of a team

# **LANGUAGES**

English Hindi Marathi



## TOOL EXPERTISE

ANL - Autonomie

Ricardo - IGNITE

DYMOLA MATLAB NREL - ADVISOR

....

MATLAB Simulink

INCA

Measurement Data Analyser

Vector CANdb++

A2MAC1

Microsoft Excel

## **AWARD & ACHIEVEMENTS**

- Received an appreciated for exceptional leadership behavior and awarded with "#Leading by Example"
- Actively participated in "IMAGINEERING an initiative by R&D department of Tata Motors to promote innovation"; prepared and presented a model for predicting clutch life
- Developed a numerical model for turbulent multi-fluid flow while working on a project sponsered by Board of Research in Nuclear Sciences (BRNS)
- Secured AIR 1086 out of 2.3-Lakh candidate appeared for the exam in Mechanical Engineering domain

# **SOCIAL ENGAGEMENTS**



#### TATA Volunteering Week

Served as a volunteer in TATA volunteering week and visited "Lions Home for Aging Blind located at Lonavala - Khandala" which helps aging and elderly blind men and women discarded by their families and bring them in to the main stream of society



### **TATA Volunteering Week**

Participated in tree plantation drive near Khadakwasla dam in Pune organized by TATA Motors for GETs/PGETs of 2018 batch



#### **Red Ribbon Club**

Served as a a core committee member of Red Ribbon Club which used to organize blood donation camps in IIT Guwahati