

# Rahul Gopalakrishnan

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## Experience

Nov 2017 – Present    TURBO ENERGY PRIVATE LIMITED    BANGALORE, INDIA

### Senior Member

- Working in Technical Center on product development using computational tools, statistical and finite element analyses
- Performing linear static, non linear, dynamic (modal) and thermal deformation analysis to design and validate components and assemblies
- Providing solutions to model structural design parameters through utilization of Design of Experiments, linear regression and multiple linear regression techniques
- Utilization of Logistic Regression and other classification techniques to evaluate product concepts based on validation criteria
- Performing sensitivity studies and scripting to reduce product concept generation times by up to 20 %
- Performing root cause analysis in collaboration with testing to solve failure related issues and meet customer requirements
- Analyzing and correlating data sets; presenting findings succinctly to upper management on a regular basis
- Re-designated within department to Senior Member from Member for continuous outstanding performance

Feb 2016 – Sep 2017    SABBATICAL

### Personal Development

- Caretaker for sick family member
- Audited Economics and Supply Chain courses on edX

Apr 2015 – Jan 2016    UNIVERSITY OF CALIFORNIA, IRVINE

### Project Work

- Handled concept generation for applications of 8 bar linkage mechanisms
- Performed various design analysis and feasibility studies

Sep 2013 – Dec 2014    UNIVERSITY OF CALIFORNIA, IRVINE

### Graduate Student

- Majored in Mechanical Engineering with a minor in Linear Algebra, Hypothesis Testing & Biorobotics; studied adaptations of human reaching movements with space/time
- Mentored undergraduate students on consumer accessories and automotive design projects

Dec 2012 – Aug 2013    GULF OIL MIDDLE EAST    DUBAI, UNITED ARAB EMIRATES

### Trainee

- Performed data analysis, root cause analysis and FMEA to resolve failure related issues
- Assisted in supervision of production planning and related activities

Sep 2009 – Jun 2012    THE UNIVERSITY OF MANCHESTER

### Undergraduate Student

- Wrote a thesis (non referred) on sustainable manufacturing and methods to reduce footprints
- Improved reliability of medical stent devices (50% and above) using finite element analysis as part of final year design consulting project for Biosensors International

## Projects

Sep 2019 – Oct 2019    BANAGLORE: THE BATTLE OF NEIGHBORHOODS

### Segmentation Project

- Conducted clustering and visualizations of neighborhoods to understand restaurant densities
- Identified locations that might be suitable for opening a new restaurant based on data

## ----- Education

Dec 2014 UNIVERSITY OF CALIFORNIA, IRVINE IRVINE, UNITED STATES  
**Master of Science in Mechanical & Aerospace Engineering**

Jun 2012 THE UNIVERSITY OF MANCHESTER MANCHESTER, UNITED KINGDOM  
**Bachelor of Engineering in Mechanical Engineering**

## ----- Courses

Oct 2019 Coursera: IBM Data Science Specialization

## ----- Honors

Jun 2012 Graduated with Honors in First Class

## ----- Skills

**Experienced:** Python [Pandas, NumPy, Scikit-Learn, Matplotlib], ANSYS, Dassault Solidworks; **Familiar:** R, SQL, HyperMesh, Abaqus

## ----- Personal Information

Date of Birth: 28 November 1991

## ----- References

On request