

**Aman Kumar**  
**B. TECH (Automobile Engineering)**  
**Bangalore**

**Date of birth** 11/04/1993  
[amankr107@gmail.com](mailto:amankr107@gmail.com)  
**09884337173**



## CAREER OBJECTIVE

I wish to join an organization for a challenging position in Design and Engineering environment, within Automotive and Engineering Industries that will encourage me to use my technical expertise, analytical skills and leadership qualities to work progressively with people as a team.

## ACADEMIC QALIFICATION

DEGREE/CLASS	INSTITUTE	BOARD\UNIVERSITY	YEAR	PERCENTAGE /CGPA
B-Tech (Automobile Eng.)	SRM University, Chennai	SRMU	2015	9.2
12 <sup>th</sup>	D.A.V Public School, Bistupur	CBSE	2010	82
10 <sup>th</sup>	D.A.V Public School, Bistupur	CBSE	2008	92.4

## WORK EXPERIENCE

**Total Work Experience: 7 Years 7 Months**

**Renault Nissan Technology & Business Centre India (RNTBCI), Chennai**  
Design Engineer from July 2015 to May 2021.

**Mercedes-Benz Research & Development India (MBRDI), Bangalore**  
Design Engineer from May 2021 to Dec 2022.

**Tata Technologies Limited (TTL), Bangalore**  
Technical Lead from Dec 2022 to Present

## EXPERTISE

- BIW
- Sheet Metal
- Surface Modeling
- Body Structure Planning & Crash Study
- Casting (Tooling Direction; Draft Analysis)
- Data & Drawing Release

## SOFTWARE SKILLS

- UG/NX (Teamcenter)
- CATIA (V5/V6)

## PROFILE SUMMARY

- ❖ **Department: Product Design & Development (BIW)**
- ❖ **Team: Closure (1 year) – Project for Indonesian Market (Datsun Brand)**
- ❖ **Platform Design & Body Structure Planning (4.5 years)**
  - 1) Local Projects: Datsun Brand (Go & Go+)**
  - 2) Global Projects: Nissan EV Vehicle (Leaf & Note)**
  - 3) Electrical Vehicle (Renault): Battery Case Design, Pole Crash**
- ❖ **Predevelopment: Mega Casting Concept for EV Platform (1.5 years)**
- ❖ **Platform Design Engineer for JLR Project**
- ❖ **Work Experience:**

### Closure

- Supported at ADS-Lot, DS & DC-Lot till Drawing Release.
- Sheet Metal (FR/RR DOOR, HOOD & BACK DOOR) Design.
- Data Storage & DMDR Activity.
- Drawing Preparation & Drawing release.
- Interaction With Supplier
- Door Lock & Mechanism Parts.
- Benchmarking with Nissan & Other OEM Vehicles.

### Platform & Body Structure Planning (Local & Global Project)

- Complete Side Crash Structure Planning.
- Structure planning by Calculating Section Strength & Benchmarking.
- Interaction with Safety Team & CAE Team regarding Crash Items.
- Benchmarking for Side Crash Parts & Load Path (Nissan & Other OEM vehicles).
- Supported For ADS, DS, DC, ET & VC-Lot.
- Physical Lot Concern Support for Side Crash (E.g., Spot Failure b/w DASH SIDE & SILL INR).
- Complete Design & Development of Side Crash Parts like REINF-SILL INR & REINF-RR SEAT CRS.
- Mass & Cost Optimization Study at DS/DC Lot.
- Side Crash Planning as per IIHS Requirement (Speed Change 60 Km/h ← 50 Km/h)
- Interaction with CAE & Safety Team.
- Section Strength Study to increase Section Strength by Changing Material & increasing thickness.
- Supported for ADS, DS & DC-Lot.
- Supported form VC-Lot Concern for 64ODB & SOL Test.
- Supported for Dash LWR & Dash Side Spot & Metal Rupture.
- Countermeasure Study by Studying Phenomena & Mode.
- Countermeasure Proposal & Design of C/M Parts.
- Countermeasure adopted in VC-Lot & Spot & Metal Rupture was Avoided.

### SUN ROOF Study for Side Crash Requirement (New Electric Vehicle)

- Side Crash Structure Planning for Sun ROOF Vehicle (Base vehicle: Normal Roof)
- Strength up by Changing Material & Thickness.
- Advanced Level Study.

### **Battery Case Design (New Electric Vehicle→ Renault Project)**

- Designing & Packaging of Battery Case as per requirements & functionality of Electric Vehicle & Side Pole Crash Requirement.
- BIW Structure Optimization by considering minimum Battery case intrusion in case of Side Pole crash.
- Battery Case Mass optimization for High Energy Density target.
- Benchmarking of Battery case for different OEMS.
- Section Strength Analysis for SIDE FRAME, CRS MBR & Other Load bearing MBRS of BATTERY CASE.
- Joining Scheme with BIW; Joining Scheme for BATTERY CASE Parts which includes Friction Welding, MIG Welding & Bolts.
- Water tightness & sealing requirements Study.

### **Predevelopment (Mega Casting Concept for Future EV Platform)**

- New Mega Casting Concept for EV Platform (Platform & Upper Body).
- Design Study for Integration of Parts.
- Tooling Direction Study & Draft Analysis (NX).
- Discussion with Manufacturing Team & Supplier regarding Manufacturing Feasibility.
- Discussion With CAE Team for Crash Performance like Front & Side Crash.
- Different Joining Element Technique Study for different Materials.

### **Platform Design Engineer (Future EV Platform)**

- Design & Development of FR FLOOR for future EV Platform
- Study of Battery Case MTG with BIW.
- Benchmarking with Other OEM Platform.
- CAD Preparation as per AVA Methodology in CATIA V6.
- Discussion with CAE regarding performance like FR Crash, Side Crash & Pole Crash)
- Counter measure Design as per CAE Feedback.

## **Achievements**

- Best Employee Award FY17 for “C/M Proposal Study for B12P (Nissan Leaf) to achieve SOL Performance in N-3 days with 100% FTR”.
- Best Employee Award FY18 for “Cost & Mass Optimization for Side Impact Structure (Datsun Go/Go+)”.
- VP Award- Best Team Award for “Battery Case Mass Optimization Study”.
- Best Employee Award (Quarterly) for working on “Mega casting” part.

## **PERSONAL CHARACTERISTICS & BEHAVIOURS**

- Strong communication, interpersonal skills.
- Ability to work with deadlines.
- Analytical skills, logical thinking and ability to take decisions independently.
- Adaptability and learning skills.

### **Declaration:**

I hereby declare that the above stated information is true to the best of my Knowledge & belief.

**Place: Bangalore**

**Date: 11-02-2023**

**Aman Kumar**