GANESH VIJAY WANKHEDE

Email: ganeshwankhede1998@gmail.com **Contact:** 7887807210

CAREER OBJECTIVE:

An amiable trilingual professional seeking new and challenging opportunities in BIW Robotic Simulation field within an organization of high repute where I can leverage my knowledge and learnings for the better future of mankind.

SUMMARY:

- A Mechanical Engineering graduate of 2020 with overall work experience in automotive industry mainly in BIW Robotic Simulation field.
- Currently working as a BIW Robotic Simulation Engineer at Tata Technologies, Pune for past 2 years.
- Having knowledge of Joining Technologies, Digital Manufacturing, Smart Factory, Industry 4.0, etc.
- Well versed with North American OEM standards for BIW Robotic Simulation.
- Proficient in GM Line Simulation.

INTERPERSONAL SKILLS:

- Active listening and Communication skills
- Leading and Presentation skills
- Teamwork and Emotional Intelligence skills
- Adaptability and Grasping skills

Software Skills:

- Process Simulate
- Process Designer
- Catia V5
- AutoCAD
- Microsoft Suite

FULL TIME WORK EXPERIENCE:

Company Name: TATA Technologies Limited, Pune **(Oct 2021-Present)**

Designation: BIW Robotic Simulation Engineer

A. **Project:** GM RA BEV (Battery Tray and Battery Cover Assembly Simulation)
Role: Offshore BIW Robotic Simulation Engineer
Software: Process Simulate and Process Designer
Duration: 1 year
Key Responsibilities:
   - Robotic cell building, robot placements, reachability study

- Validating tools (weld guns, geo & respot fixtures, holding bucks, grippers, etc.) and preparing supported documents for gun-product issues, gun-tool issues, gun section sheets, etc.
- Distributing, assigning, projecting and aligning the weld spots.
- Collision-free path planning for material handling, welding, and dispense robots
- Preparing service paths such as tip-dressing, cap changing paths, repair paths and calibration paths.
- Validating system layout and providing inputs to the SL team.
- Communicating with cross-functional teams such as design team and layout team frequently to get queries and issues resolved.
- DCS creation and its definition in robot setup
- Calculating station cycle time and robot cycle time.
- Defining interference zones
- Creating and downloading OLPs
- Preparing final deliverables documents such as RDS, TDS, DDS, etc.
- Line simulation of the complete work cell.

B. **Project:** GM OR Body Sides Assembly Simulation (Bin-Picking Robotic Cell)
Role: Offshore Simulation Engineer
Software: Process Simulate
Duration: 6 months
Key Responsibilities:
   - Robotic cell building, robot placements, reachability study
   - Bin-picking process definition both for Keyence and photoneo vision systems.
   - Validating camera structures (keyence & photoneo), 2D offset cameras, reposition fixtures (flip stands), turntable bins, racks, grippers with calibration flag, etc.
   - Cycle time calculation for bin-picking process.
   - Validating system layout.
   - Presenting robotic work cell in end customer's weekly reviews (simulation reviews, layout reviews, design reviews, etc.)
   - Creating and downloading OLPs along with supported deliverables.
   - Line simulation of complete body sides assembly zone.
   - Exporting final project XML.

C. **Project:** GM LDT (Front floor, Rear floor & Underbody Assembly Line Simulation)
Role: Offshore Simulation Engineer
Software: Process Simulate
Duration: 15 days
Key responsibilities:
   - Pre-line simulation activities including robotic cell cleanup, transition clear, generating part appearances, generation of robot signals (default and custom), adding part present sensors, generation of tool signals, etc.
   - Writing modules for all the robots, tools, and for interference zones if any.

- Validating line simulation study by adding cycle timer logic.
- Preparing line simulation deliverables such as video of complete robotic work cell validated in line simulation and pszx of work cell.

D. **Project:** GM SLP Body Sides Assembly Line Simulation (In RCS)
Role: Offshore Simulation Engineer
Software: Process Simulate
Duration: 15 days
Key Responsibilities:
- Pre-line simulation activities including robotic cell cleanup, transition clear, generating part appearances, generation of robot signals (default and custom), adding part present sensors, generation of tool signals, etc.
- Writing modules for all the robots, tools, and for interference zones if any.
- Running complete robotic work cell in RCS.

E. **Project:** GM CAMI BV1HX Front Compartment Assembly Simulation
Role: Shadow Resource
Software: Process Simulate
Duration: 2 months
Key Responsibilities:
- Projecting weld spots and aligning them.
- Preparing final project deliverables documents such as Robot Data Sheet (RDS), Tip Dresser Sheet (TDS), and Dispense Data Sheets (DDS)

INTERNSHIP WORK EXPERIENCE

Company Name: Bajaj Auto Limited **(Jan 2020 – Mar 2020)**

Designation: In-Plant Trainee

Department: Final Assembly Shop of Motorcycle Division
Key Responsibilities:
- Common improvements and stage wise improvements of the assembly line.
- Part Commonisation Proposal and coming up with new Kaizen.
- Preparing sensory check sheet and input-output sheet(IPO)
- Examining the problems that occurred during ECU flashing.
- Stage wise inspection points of the assembly line.
- Study of vehicle standardisation (cable routings)
- Differentiating the BS4 and BS6 models.
- Identifying different losses that occurred during assembly operations.
- Torque Process Capability study
- Line balancing.

ACADEMIC DETAILS:

- **Bachelor of Technology in Mechanical Engineering** from Maharashtra Institute of Technology, Aurangabad. (9.39 CGPA, 2020)
- **Post S.S.C Diploma in Mechanical Engineering** from Government Polytechnic, Aurangabad. (90,71%, 2017)
- **S.S.C.** from Maharashtra Public School, Aurangabad. (96.40%, 2014)

ACADEMIC PROJECTS:

- Design and fabrication of Arduino Based Paper Cutting Machine
- Improving Existing Removal Method of Extra Leads and Solder Points of PCB
- Design and fabrication of Bio-Sand Water Filtration System
- Design and fabrication of Parabolic Concentrating Type Solar Cooker

PERSONAL PARTICULARS:

- Name: Ganesh Vijay Wankhede
- Date of Birth: 01/09/1998
- Marital Status: Single
- Languages Known: Marathi, Hindi and English