

Sathiaraj Rajendran
CY4 Digital Twin Product & Solutions Pvt. Ltd. | Project Manager | Chennai, India

BASIC INFORMATION

Experience in:	Automobile & Heavy Machinery Manufacturing Industry
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Language:	English, Malayalam, Hindi and Tamil.
Address:	Chennai, India.

CAREER CONTOUR

I am unwavering, meticulous, and highly competent in the **Automobile & Heavy Machinery Manufacturing Industry**. I have a consistent record of transporting the best results-driven work with a proven ability in implementing my work in an organised manner for **11+ years** of my successful career.

My expertise:- **Automobile & Heavy Machinery Manufacturing Industry – BIM Coordination, Layout Engineering, Plant Simulation, Digital Twin Execution, Clash Detection, Cloud Collaboration, 3D Modeling, Virtual Installation, Process Optimization, Stakeholder Management, Risk Management, Project Lifecycle Management**. I have in-depth knowledge of all the ethics of management. I possess effective communication skills and am a team player with strong organisational, Logical, and Problem-Solving Abilities.

I have great exposure to working with large-scale organisations like **CY4 Digital Twin Product & Solutions Pvt. Ltd., Advanced Mechanical Services India Pvt. Ltd.** I am well-versed in skills in analysis, problem-solving, and coordination, which make me so successful and dedicated. Strong influencing and negotiation skills coupled with a proven ability to think in and out of the box, generating new solutions.

I have commenced my profession as an **Executive** and risen myself as **Project Manager** in a reputable company. I would like to see myself growing with the passing years of hard work and dedication. I have been awarded many accolades for my result-oriented hard work.

Armed with a multitude of competencies and work experiences, I am confident to carry forward any organisation's vision & objectives with sufficient ease and dedication to my job responsibility.

EXPERIENCE

Dec 2023 – Present | Project Manager | CY4 Digital Twin Product & Solutions Pvt. Ltd.

Responsibility:-

- Leading a team of 60+ engineers delivering digital twin and layout engineering projects.
- Overseeing project planning, quality assurance, and team performance monitoring.
- Managing onboarding, training, and workload distribution for new and existing team members.
- Driving project coordination to ensure on-time delivery aligned with client expectations.
- Handling billing, invoicing, and governance for multiple concurrent digital twin projects.
- Coordinating with cross-functional teams to ensure seamless integration of design, simulation, and execution workflows.
- Monitoring project risks and implementing mitigation plans to maintain delivery timelines and quality standards.
- Reviewing digital models, layouts, and simulation outputs to ensure accuracy, compliance, and project readiness.
- Streamlining processes by introducing best practices, SOPs, and workflow enhancements to improve team efficiency.
- Collaborating with clients for requirement gathering, design validation, and periodic project reviews.

- Ensuring adherence to organizational and client-specific CAD/BIM guidelines, engineering standards, and quality benchmarks.
- Managing resource allocation across multiple projects to maximize productivity and reduce idle capacity.
- Supporting digital twin implementation, including data integration, layout updates, and virtual factory validation.
- Overseeing vendor coordination for scanning, modeling, and third-party engineering deliverables.
- Preparing weekly and monthly progress reports for leadership review and performance assessment.
- Facilitating technical training sessions to upskill team members on latest tools like Revit, Navisworks, and BIM 360.
- Driving continuous improvement initiatives focused on reducing rework, improving accuracy, and enhancing delivery speed.

PREVIOUS EXPERIENCE

Apr 2022 – Aug 2023 | BIM Coordination Engineer | (Deputed at MBRDI Pune) Advanced Mechanical Services India Pvt. Ltd.

Responsibility:-

- Coordinated with suppliers for RFQs, quotations, and purchase orders (BANF platform).
- Performed reverse engineering for laser-scanned models using company standards.
- Ensured quality of laser scanning outputs and alignment with project requirements.
- Managed 3D model updates, ensuring design consistency across disciplines.
- Supported change management and interdisciplinary coordination for design updates.

Aug 2016 – Apr 2022 | Layout Engineer | (Deputed at Ford Motors) SATVEN Engineering Services Pvt. Ltd. | Chennai

Responsibility:-

- Prepared IFC, IFB, and IFD drawings per OEM CAD guidelines.
- Simulated machinery installations using Navisworks & Process Simulator.
- Designed factory layouts supporting new product launches and MEP coordination.
- Performed clash detection using Navisworks and resolved interferences.
- Modeled space, safety envelopes, and traffic patterns for manufacturing facilities.

Apr 2015 – Aug 2016 | Assistant Engineer | Caterpillar India Pvt. Ltd. (via Randstad) | Chennai

Responsibility:-

- Conducted virtual design reviews, human simulations, and ergonomics studies.
- Supported factory layout planning, MBOM validation, and process improvements.
- Developed 2D and 3D factory models to enhance production workflows.

ACHIEVEMENTS

- Reduced onboarding time by 15% through optimized training and workflow strategies.
- Achieved 10% cost reduction through efficient workload distribution and resource planning.
- Resolved 95% of all project interferences during the MBRDI project lifecycle.
- Reduced project clashes by 20% through comprehensive digital clash analysis.
- Improved space utilization by 15% via optimized layout engineering.
- Reclaimed 27,000 sq. ft. of factory space through layout redesign.
- Completed scanning of a 200,000 sq. ft. manufacturing facility and built corresponding 3D models.
- Started my career as an Executive and rose to a Project Manager.

ACADEMIC FORTE

- Bachelor of Science in Mechanical Engineering from Annamalai University, Tamil Nadu, India (2008 – 2012)

Training & Certifications:

- Autodesk Revit Professional Training
- Autodesk Navisworks Manage – Clash Detection & Simulation
- AutoCAD / AutoCAD MEP Advanced Training

- BIM 360 (Autodesk Construction Cloud) Workflow Training
- Point Cloud Processing & Scan-to-BIM Training (FARO / Recap)
- Factory CAD / Plant Simulation Training
- MicroStation Professional Training
- Safety & Quality Compliance Training (as per OEM standards)

TECHNICAL PROFICIENCY

Well-versed with

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|---|----------------------------------|
| • Autodesk Revit | • Factory CAD / Plant Simulation |
| • Autodesk Navisworks | • Teamcenter |
| • AutoCAD / AutoCAD MEP | • Autodesk Inventor |
| • Microstation | • Autodesk Recap / Vault |
| • BIM 360 / Autodesk Construction Cloud | • Faplis |
| • Point Cloud Processing (FARO) | |

Advice for Contacting: I'm always open to conversation, networking with like-minded professionals, or discussing future prospects. Connect with me on LinkedIn or contact me at sathiaraj.rajendran@gmail.com