SUSHANT RAUT
Lead Solution Architect

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Highlights:

1. **Over 20 years** of comprehensive experience spanning Product Lifecycle domains, including Product Engineering, IT Product Development, **PLM**, **MES**, and **IIoT**, covering every critical phase in the lifecycle.
2. Deep expertise in analysing and optimizing business processes, with a strong understanding of SAP data models and processes and their seamless integration into Teamcenter workflows.
3. Advanced proficiency in configuring and customizing Teamcenter (including Active Workspace) to meet diverse business needs, specializing in **Change Management**, **MBOM and BOP Management**, **EBOM**, and **Product Configuration**.
4. Knowledge of MES tools like Opcenter Execution Descrete and Opcenter Execution Core.
5. **Proven track record** of delivering solutions as a Solution Architect, backed by extensive hands-on experience in customer projects and diverse implementation scenarios.
6. Excellent product development experience including from complex CAD application development to the IIoT cloud based solutions. Command over many Programming Languages and Technologies.

Projects Highlights:

1. June 2023 Onwards, **Lead Solution Architect** for **Manufacturing and Easyplan** at **Siemens Mobility**
2. March 2021 to June 2023, As a **Manufacturing Solutions Architect** in **Siemens MyTC Project Germany**.
3. June 2016 to December 2020, As a **Manufacturing Solutions Architect** in **Siemens IEC Project Germany**.
4. June 2015 to June 2012, As a **Solution Architect** in a KPDM Project **Volkswagen AG**, Wolfsburg Germany
5. July 2008 to March 2015, As a **Software Architecture** for **Product Development** for Siemens PLM.

Projects in Details:

Role	**Solution Architect for Easyplan/Teamcenter Manufacturing/Core**
Projects	*Siemens Mobility Project, Germany (June 2023 Onwards)*
	Siemens MyTC Project, Germany (From March 2021 to June 2023)
	Universal Robotics, Denmark (POC March/April 2023)
	Siemens IEC Project, Germany (From Jun 2016 to December 2020)
	(from Intelizign Engineering Services GmbH)

Responsible for orchestrating the integration of Manufacturing processes into the Product Lifecycle Management (PLM) System, leveraging Easyplan/TC MPP for seamless execution.

- **MBOM/BOP Management**: Bringing effective MBOM and BOP Management by understanding Material Management, Plant Specific View and Routing management from SAP. Complete Understanding of Easyplan and related modules.
- **Change Management**: Bringing efficient change management process inside Teamcenter to seamless integrate with downstream processes.
- **DBOM/EBOM/Product Configuration**: Understanding of all aspects and bring solutions to satisfy customer requirements.
- **Manufacturing Part and Plant Localization**: Ensuring optimal utilization of manufacturing resources and localized production strategies.
- **ETO and BTO Process Planning**: Spearheading Engineer-to-Order (ETO) and Build-to-Order (BTO) process planning for customized production, including Electronics Work Instructions.
- **Visualization**: Solve critical visualization issues to make it working for customer data model and environment. Deep understanding of how Visualization works inside Teamcenter based on previous experiences.
- **Process and Plant Simulation Integration**: Integrating simulation techniques into processes and plant operations for enhanced efficiency.
- **Business Specific Case Studies**: Conducting in-depth studies on specific business scenarios such as bulk change management and user profile management.
- **Downstream System Integration**: Collaborating on the seamless integration of downstream systems to streamline operations and enhance overall system performance.
- **Customization and configuration**: Expert command over Teamcenter customization including upcoming new C# based scripted customization.

By strategically managing these aspects, contributing to the efficient operation of manufacturing processes and ensuring a cohesive integration with the PLM System.

Role	**Product Development @ Intelizign**
Projects	*In-house Expert for Intelizign*

Played a pivotal role in shaping some of Intelizign's industry-leading products. Leveraged extensive product development expertise and a deep understanding of business needs to drive innovation and deliver impactful solutions.
Key Contributions:

- **EZXChange**: Spearheaded the development of this easy-to-configure data exchange platform for Teamcenter. Led product development and actively participated in presales engagements with various customers, ensuring successful configurations tailored to business requirements.
- **Myscript**: Conceptualized and developed a deployment-less customization approach, the foundation of the 'Myscript' product. Drew inspiration from the gaming industry to create a novel solution addressing critical customization challenges within Teamcenter.

Role	**Opcenter @ Intelizign**
Projects	*Head of Center of Excellence for MES*

Successfully established the MES Center of Excellence at Intelizign, creating a strong foundation for expertise in Siemens Opcenter Suite products. Spearheaded the grooming of a skilled resource pool proficient in configuration and customization across Opcenter solutions.

Led key initiatives including:

- Setting up PoC environments for Opcenter Execution Discrete and Opcenter Execution Core.
- Conducting training programs to build MES capabilities within the organization.
- Establishing Teamcenter integration for closed-loop manufacturing, showcasing end-to-end digital transformation.
- Developing capability demonstrations using tools such as Opcenter Connect and Connect MOM to highlight advanced manufacturing solutions.

Role	**Full Stack Developer for Smart Home Project EZIE.IO**
Projects	*Product Invention (EZIE.IO)*

The experience with my IoT project at *ezie.io* is significant as it showcases my ability to independently design and deliver a complex, end-to-end solution. This project demonstrates my technical versatility, creativity, and hands-on experience with IoT, which are all critical for a Solution Architect role. Key aspects include:

- **Full Project Lifecycle Management:** Led all stages from conceptualization to deployment.
- **Cloud Infrastructure Development:** Built a robust AWS cloud backbone to support IoT functionalities.
- **Firmware and Electronic Design:** Developed device firmware and managed electronic pcb designs.
- **Mechanical Design and Prototyping:** Designed mechanical components, created injection molds, and oversaw prototyping.
- **User Interface and Graphics:** Designed the website and all associated graphics.

This project reflects my capacity to tackle intricate technological challenges and deliver successful IoT solutions. Visit ezie.io for the product in action. Tools and Technologies used include Eagle for ECAD, Fusion for MCAD, C++ for firmware development, AWS (Lambda, IoT Core, Dynamo DB), Alexa Skill Development.

Solution Name	**ICEM/ALIAS-CONNECT Integration**
	(Volkswagen, Wolfsburg, Germany)
	(from Intelizign Engineering Services GmbH)

ICEM/ALIAS-CONNECT Integration is the solution for integrating ICEM and ALIAS with Teamcenter Rich Client.
- Requirement Understanding, Detailed Technical Specification Definition, Project Planning and Implementation Monitoring.
- Solution Architect for this solution
- Project has modules like Rich Client Application, Alias Plugin and ICEM Plugin.

Duration	December 2015 Onwards
Technologies	**JAVA, C++, Teamcenter ITK Framework, RAC Plugin Development**

Product Name	**Teamcenter Visualization** *(Siemens PLM Software Company Pvt. Ltd. Pune)* (from Intelizign Engineering Services Pvt. Ltd.)

Teamcenter Visualization (VisView) is Lightweight viewer for JT file format. This viewer allows user to perform various visualization related operations on opened file, for example navigation, explosion, cross sections, animation, motion path analysis, clearance analysis etc.

- Leaded various projects in this team for clients like Fiat, Honda, Daimler and VW. Activities like coordinating with customers for functional specification preparation, design preparation, monitoring progress and ensuring final delivery with high quality.
- Added new measurement type for Measurement between Plane and Part Set.
- Improved Part Set measurement Performance by almost 400%.
- Developed an algorithm for calculation of **Optimum Bounding Box** for selected parts. Worked on various algorithms like Convex Hull 2D, Rotating Caliper for this project.
- Designed and implemented base for **Undo Redo system** for VisView.
- Designed and implemented improvements in cross sections like Section Grid Label Display and its dynamic adjustment with user action.
- Designed and implemented associative measurements and measurement change logging with transformation.
- Improved Path collision detection module as per requirements.

Duration	July 2008 to March 2014
Technologies	**VC++, COM**

Product Name	**NX Drafting** *(Siemens PLM Software Company Pvt. Ltd. Pune)* (from Intelizign Engineering Services Pvt. Ltd.)

NX is well known CAD software. NX is a next-generation digital product development system that helps companies transform the product lifecycle with the industry's broadest suite of integrated, fully associative CAD/CAM/CAE applications.

- Worked on Project called Lightweight Drawing Views in NX. This Project is mainly for improving memory utilization and performance of NX Drafting Application. My work involved retrofitting existing functionalities with new lightweight architecture.
- Leaded and successfully delivered various small projects based on tasks related to Lightweight Drawing Views.

Duration	March 2011 to July 2013

Previous Engagements:

Organization	**Geometric Ltd. Pune.** *(Now HCL)*
Duration	January 2006 to July 2008
Designation	Senior Software Engineer
Product Name	**eDrawings**

eDrawings Publisher is Product of Geometric Ltd. This product is used for transferring 2D and 3D Engineering data into CAD neutral eDrawings format from Solidworks (Dassault Systemes S.A.).

I was responsible for maintaining eDrawings Publisher for Autodesk Inventor, AutoCAD, CoCreate One Space Design Modeler, Kompas 3D. I got exposure to work in API's from these CAD packages, 3D Graphics Terminologies, DWGDirect and various compression / encoding algorithms like Huffman, Arithmetic, Bitlength, Deering Normal; basically all things related to 3D Graphics compression.

Duration	July 2006 to July 2008
Technologies	VC**++,** CAD API's, DWGDirect, XAML, Microsoft Blend etc.

Organization	**Vertex Software Pvt. Ltd. Pune.** A CMM 5 level Company having clients from Japan and US both.
Duration	September 2005 to January 2006
Designation	Software Engineer
Project Name	**Data Analysis Toolkit** This is rich UI based Windows application which is used by Data Analyst for the purpose of Data mining and Analysis of Data.
Duration	September 2005 to January 2006
Technologies	C# .NET

Organization	**Rishabh Instruments Pvt. Ltd., Nashik** An ISO 9001 company and 100 % EOU is leading manufacturer of measuring instruments.
Duration	August 2003 to August 2004
Designation	Executive - Tool Room
Project Name	● Modeling of sheet metal and plastic components using Unigraphics NX ● Press tool, Molds, Jigs Fixtures designs ● Handing Production in Press Shop and Managing Tool Room Dept. .
Duration	August 2003 to August 2004

Educational Qualification:

- Diploma in Advanced Computing (DAC) August 2005.
- Mechanical Engineering. Year of passing: 2003.
  Institute: Government College of Engineering, Karad.

Employment Highlights:

- **June 2015 Onwards: Intelizign Engineering Services GmbH, Germany**
- **July 2008 to May 2015: Intelizign Engineering Services Pvt. Ltd., India**
- January 2006 to June June 2008: Geometric Ltd., India
- September 2005 to January 2006: Vertex India Pvt. Ltd., India
- August 2003 to July 2004: Rishabh Instruments Pvt. Ltd., India

More Information:

- Citizenship: **German, Indian**
- Languages: English, Marathi, German (B1)