
Summary:

Experienced software engineer with 10+ years of expertise in software/application development, engineering, and scalable solutions. Proven track record of success, delivering high-quality software that meets business requirements and adds value to end-users. Strong collaboration skills, up-to-date with latest advancements in technology.

Professional Summary:

- Extensive expertise in **customizing** and **implementing Dassault Systems' 3DEXPERIENCE/DELMIA** solutions using diverse technologies.
- Proficient in various technologies, including **C, C++, CAA V6 (Component Application Architecture), C# .Net, EKL scripting, VBA, and Core Java**.
- Well-versed in **developing** and **deploying** business rules (**CATRules**) on both client and server sides, as well as **customizing BI Essentials** on the **3DEXPERIENCE Native** client.
- Proficient in developing **EKL Actions, Checks, and Rules** using **Engineering Rules Capture** and **Know-how Reuse App**, with fundamental knowledge of **KAC Know-how App development**. Also worked on **VBA macro development** on 3Dx.
- Developed several **custom commands and batches using CAA** to efficiently process bulk data creation and correction in alignment with specific business requirements.
- Proficient in working with various **3DEXPERIENCE Apps**, including **Process Planning, Manufactured Item Definition, Equipment Allocation, Work Instruction, Product Structure, Change Management, Manufacturing Context Builder, RFLP, Collaborative Lifecycle Management, and Data Setup**.
- Strong understanding of key **3DEXPERIENCE/DELMIA** concepts, including **PPR (Product, Process, and Resource), Scope Link, Implementation Link, Capable Link, MBOM, Routings, Resources, Work Instructions, Change management, variant management, Manufacturing requirement, Product buildup**.
- Proficient in working with various **3DEXPERIENCE releases**, including **R2014, R2014x, R2018x, R2020x, R2021x, R2022x, R2023, R2024** both on the **Native client and On Cloud**. Also worked with **CATIA V5 R25**.
- Strong understanding of **Object-Oriented Programming (OOPs)** principles and proficiency in various programming concepts across different technologies like **C++, C#, Java, VBA**.
- Good understanding of **Data Model Customization** used for creation of subtype, attributes and various types of extensions using **Unified Typing**.
- Familiarity with **ENOVIA Product Lifecycle Management (PLM)** concepts such as **MQL, TCL, UI components, Spinners, Triggers, Policies, etc.**
- Thorough understanding of **3DEXPERIENCE Architecture**, along with a basic-level understanding of **widget development**.
- Basic understanding of several DELMIA applications like Factory flow simulation, Ergonomics, Robotics.
- Performed code refactoring, code cleanup, and code fine-tuning activities to optimize code quality and performance.
- Played effective roles in all assigned projects, taking allocated tasks to completion with high client satisfaction.

Work Experience:

TATA TECHNOLOGIES LIMITED (Sept 2014 – Feb 2018)

Designated as Solution Developer.

Project: Automobile Manufacturer.

Versions: 3DEXPERIENCE (R2014, R2014x, R2017x).

Responsibilities:

- Accountable for the implementation of multiple **customizations and enhancements** in **3DEXPERIENCE DELMIA R2014** using **CAA**.
- Created various **customized CAA commands and batches** for bulk data processing as per the business requirements.
- Developed **business logic scripts, including BI Essentials**, for both the client and server side.
- Developed multiple utilities using **C#, VBA, and Core Java**.
- Creation of sub types, customs attributes etc. using **Data Model Customization**.
- Worked on various **3DEXPERIENCE** apps like **Process Planning, Manufacturing item definition, Equipment Allocation, Collaborative lifecycle management** etc.
- Creating development notes, test scripts, and technical documents, and responsible for testing, validating, and deploying applications.
- Responsible for software maintenance and support at offshore.

INFOSYS LIMITED (Feb 2018- July 2018)

Designated as Associate Consultant.

Project: Transportation & Mobility.

Versions: 3DEXPERIENCE R2017x

Responsibilities:

- Supporting ongoing Data Migration project from V5 to V6 using CoEX.
- Responsible for software maintenance and support at offshore.
- Responsible various **Custom Commands and Batch** development using **CAA V6** for **DELMIA** customization.
- Worked on **Process Planning, Manufacturing item definition, Equipment Allocation** applications in **DELMIA**.
- Developed **Business logic scripts (client and server side)** including **BI Essentials**.
- Worked on development of various POC's and proposed to customer.

HCL LIMITED (July 2018 – Jan 2020)

Designated as Senior Software Engineer.

Project: Automobile Manufacturer.

Versions: 3DEXPERIENCE R2019x, CATIA R25.

Responsibilities:

- Technical Assessment for Code migration from **CATIA CAA V5** to **CAA V6 3DEXPERIENCE R2019x**.
- Created various technical documents and identified replacement/workaround for deprecated APIs in CAA V6.
- Developed various CAA tools, performed enhancements, and fixed bugs on Electrical Harness System, Product Structure, and Part Design workbenches in CATIA R25 for CAA V5.
- Contributed to feature and command rationalization efforts to streamline and reduce migration efforts.
- Created development documents, solution approach documents, test scripts, test patterns, and other technical documents.
- Responsible for software maintenance and support at offshore.

CAPGEMINI LIMITED (Jan 2020 – May 2022)

Designated as Consultant.

Project: Automobile Manufacturer, Pulp, Paper, and energy Industry.

Versions: CATIA V6, 3DEXPERIENCE (R2018x, R2021x).

Responsibilities:

- Independently handled end-to-end software development life cycle, including interacting with users, gathering requirements, finalizing solution approach, development, testing, documentation, and deployment.
- Developed several **CAA commands and batches** for bulk data processing to automate repetitive user tasks, save time, and minimize human error.

- Developed **EKL business logic scripts** (client-side and server-side), **BI customization**, and created **VBA macros** for process automation.
- Designed and developed various utility programs using C# and VBA.
- Responsible for software maintenance and support at offshore.

L&T Technology Services (May22 – Dec23)

Designated as Tech Lead.

Project 1: Elevator and Escalator manufacturer OEM planning to migrate from existing legacy systems to 3DEXPERIENCE for Digital Twin generation.

Project 2: Leading EV truck manufacturer.

Versions: 3DEXPERIENCE R2023x | Cloud environment.

Responsibilities:

- Worked as a Techno-Functional Consultant for DELMIA, supporting end-to-end implementation on the 3DEXPERIENCE platform.
- Engaged with business users to analyze existing (AS-IS) processes and delivered optimized solutions on the 3DEXPERIENCE platform tailored to future business needs.
- Led full-cycle DELMIA implementation—from engineering design data handoff through process planning, resource allocation, and work instruction creation—to enable seamless MES integration and efficient shop floor execution.
- Extensively worked on 3DEXPERIENCE applications including Process Planning, Manufacturing Item Definition, Equipment Allocation, Change Management, Work Instructions, Manufacturing Context Builder, and ENOVIA Bookmarks.
- Designed and developed custom solutions using EKL (Enterprise Knowledge Language) actions, reactions, checks, along with VBA macros and CATRules, to support validation, automation of business rules, data creation, and structure exports—significantly enhancing user productivity and reducing manual effort.

ACCENTURE INDIA (Dec 2023 – Present)

Designated as Associate Manager.

Project: MIX PLM Implementation.

Versions: CATIA V6, 3DEXPERIENCE (R2024).

Responsibilities:

- Served as the Domain Architect for DELMIA within a greenfield 3DEXPERIENCE PLM implementation.
- Collaborated closely with business stakeholders to analyze and translate client requirements into scalable, future-ready To-Be solutions using 3DEXPERIENCE.
- Designed and finalized the data model and overall solution architecture in alignment with business goals and system capabilities.
- Led a cross-functional team of ~10 members, including developers and testers, to deliver key technical components and ensure successful solution deployment.
- Collaborated with multiple cross-functional teams to enable **integration of 3DEXPERIENCE with external systems** such as **SAP, Apriso, and Twenty5**, ensuring end-to-end process continuity and data flow.

Trainings and Certifications:

- **3DEXPERIENCE Widget Development Fundamentals.**
- **VPLM Development Implementation Practices.**
- **3DEXPERIENCE Configuration and development Fundamentals - Level 1.**
- **3DEXPERIENCE Installation Fundamentals - Level 1.**
- **3DEXPERIENCE DELMIA Brand Essentials.**
- **3DEXPERIENCE ENOVIA Brand Essentials.**
- **3DEXPERIENCE on the Cloud.**
- **3DEXPERIENCE Installation Essentials - Level 1.**

- Work Instruction authoring and publishing.
- Agile Principles and Methodologies.

Education:

Graduation: Bachelor of Engineering (Computer Science) – 64% (2013).

Post-Graduation Diploma: Development for Advance Computing (C-DAC) - 75% (2014).

Percentage:

HSC: 77% (2009).

SSC: 75% (2007).

Personal Details:

Full Name: Kushal Santosh Patil

Date of Birth: 29 August 1990

Passport: Yes (Valid).

Address: D809, Pebbles Urbania, Siddharth Nagar, Bavdhan, Pune. Pincode-411021.