ISHAN

Senior Technical Documentation Engineer | API & Developer Experience | M.Tech Microelectronics
Location: Bengaluru, Karnataka | Phone: +91-7009089370
Email: ishanbhardwajsharma@gmail.com
LinkedIn: linkedin.com/in/ishan-bhardwaj-6960b716a

PROFESSIONAL SUMMARY

Senior Technical Documentation Specialist with a degree in Microelectronics Engineering (M.Tech, BITS Pilani) and experience in software lifecycle management. Over 8 years of experience architecting developer-grade documentation for complex EDA, Semiconductor, and Defense ecosystems. Expert in analyzing raw source code and hardware specifications (RTL, PCIe, Python) to author precise API references, integration guides, and architectural workflows. A proactive 'Docs-as-Code' advocate currently involved in developing automation scripts and AI-driven content to optimize scalability across a 9-product portfolio. Proven ability to bridge the gap between deep-tech engineering teams and end-user success.

CORE COMPETENCIES

- **Technical Writing:** API Documentation, DITA XML, Structured Authoring, Developer Guides, Release Notes, White Papers.
- **Tools & Platforms:** Oxygen XML Editor, Adobe FrameMaker, Snagit, Visio, Inkscape, Jira, Confluence, SharePoint.
- **Engineering & Scripting:** Python (Scripting), HTML/CSS, XML/XSLT, Perforce, Git/GitHub, Azure DevOps.
- **Domain Knowledge:** EDA (Electronic Design Automation), VLSI/Semiconductors, PCIe/CXL Protocols, Agile/Scrum.

PROFESSIONAL EXPERIENCE

ANSYS SOFTWARE PVT. LTD. | Bengaluru, Karnataka
Senior R&D Documentation Specialist | May 2022 – Present

- **API & Source Code Analysis:** Authored comprehensive **Python API Reference Manuals** for Ansys Seascape product libraries by analyzing source code to accurately define functions, parameters, attributes, and keywords.
- **Information Architecture at Scale:** Manage the end-to-end information architecture for a massive portfolio of **~9 flagship simulation products** (including RedHawk-SC, Totem-SC, PathFinder-SC, and On-chip electromagnetics products), ensuring terminological consistency and structural integrity across diverse engineering verticals.
- **Developer Workflow & Integration:** Developed end-to-end **Integration Guides and Workflow documentation**, translating complex simulation test cases into step-by-step

implementation procedures for high-tech customers (e.g., Qualcomm, NVIDIA, Intel).

- **Automation & Efficiency:** Designed and implemented **documentation automation workflows** by evaluating and integrating advanced tools, plugins, and extensions, significantly reducing manual overhead and optimizing the team's 'docs-as-code' pipeline.
- **AI Innovation Strategy:** Spearheading the **"AI in Documentation" initiative**, researching and testing LLM-driven workflows to enhance content generation, semantic search, and user assistance capabilities.
- **Engineering Support:** Published technical **Troubleshooting Guides and FAQs** based on real-world implementation scenarios, resolving critical blockers for engineers and reducing support ticket volume.

SYNOPSYS INC. | Bengaluru, Karnataka
Technical Writer 2 | March 2020 – May 2022

- **Hardware Interface Documentation:** Authored complex hardware interface documentation for **PCIe and CXL High-Speed Controllers**, translating register-level specifications (RTL) and signal descriptions into developer-ready Databooks and Reference Manuals.
- **Tooling Automation:** Developed custom **Perforce automation scripts** to validate file status and integrity on the P4 server, eliminating manual version control errors for the documentation team.
- **Visual Technical Communication:** Transformed dense technical specifications into intuitive architectural diagrams and flowcharts using **Visio and Inkscape**, improving readability for complex system protocols.
- **Team Enablement:** Conducted technical ramp-up sessions for new writers, training them on DITA XML concepts and the specific technicalities of semiconductor IP projects.

BHARAT ELECTRONICS LIMITED (BEL) | Bengaluru, Karnataka
Contract Engineer (Systems Integration) | December 2018 – December 2019
Graduate Engineering Trainee (ATE) | January 2018 – December 2018

- **Systems SME (Defense Projects):** Served as a Systems Integration Engineer for mission-critical defense projects (SCHILKA, Weapon Locating RADAR), validating system performance against rigorous functional and acceptance criteria (ATP/PTP).
- **Hardware-Software Interface:** Conducted component-level testing for **RF Modules and PCBs**, gaining deep insight into the hardware-software handshakes that inform my current ability to document complex electronic design tools.
- **Field Reliability Engineering:** Directed **field deployment and integration testing** in border areas, documenting real-time system behavior and creating feedback loops to improve reliability.
- **Test Systems Management:** Operated high-precision test equipment (Windchill, Oscilloscopes, Spectrum Analyzers) to perform signal verification and troubleshooting on analog/digital systems.

EDUCATION

Master of Technology (M.Tech), Microelectronics
Birla Institute of Technology and Sciences (BITS), Pilani | 2021 – 2023

Bachelor of Technology (B.Tech), Electronics and Communication Engineering
Guru Nanak Dev University, Amritsar | 2012 – 2016

PROFESSIONAL LEADERSHIP

TechWriter's Tribe (TWT): Active member, volunteer, and **Host** for the Bangalore Conference. Organized and facilitated large-scale knowledge-sharing events, connecting technical writers across the industry and fostering peer learning.

AWARDS & ACHIEVEMENTS

- **"Legends at Work" Award (June 2024)**: Recognized for the exceptional contribution in implementing FAQs infrastructure for the customers, as well as an internal knowledge project, and published 5000+ FAQs in a quarter.
- **"One Ansys - Being You" Award (Dec 2023):** Recognized for exceptional contribution towards PFSC and RHSC-ET User Manuals.
- **"Results and Accountability" Award (Dec 2022):** Appreciation for successful Helic User Manual conversions and release documentation.

CERTIFICATIONS

- **Dale Carnegie: Effective Communications Course** (Instructor-led In-person training)
- **Specialized Coursework (LinkedIn Learning & PMI):** Completed advanced tracks in **API Documentation (JSON/XML), XML Essential Training,** and **Agile Project Management with Jira Cloud.**
- **Technical English for Engineers** (NPTEL / IIT Madras)