SWAPNIL SAPRE

Semiconductor Technologist | Deep-Tech Advisor
Engineering & Product Leader

24+ years · AI processors · ASIC / SoC · Embedded systems · Product engineering · High-volume manufacturing



ABOUT

Swapnil Sapre is a seasoned semiconductor and technology professional with over 24 years of experience spanning ASIC/SoC design, chip architecture, AI processors, embedded systems, product engineering and high-volume manufacturing.

He has held technology and engineering roles across leading organizations including Ambient Scientific, Western Digital, AMD, Freescale/NXP and Mindtree, bringing an end-to-end perspective from system architecture and silicon development to software, productization and commercial deployment.

Currently an engineering leader and independent technology advisor, he works with deep-tech startups and emerging technology organizations across AI, semiconductor chips, embedded systems, hardware–software integration, product architecture, prototyping and technology commercialisation. He is particularly interested in helping ideas evolve into viable, scalable and market-ready products.

Beyond technology, Swapnil is passionate about entrepreneurship and intrapreneurship, mentoring young engineers, semiconductor skill development and strengthening India's deep-tech and innovation ecosystem. His interests extend to arts, sports and music, and the role they play in creativity, discipline, learning and human development. He strongly believes in holistic education, happiness, wellness and nurturing well-rounded individuals.

Building technology with purpose, businesses with responsibility, teams with trust, and people with empathy.

CAREER AT A GLANCE

Ambient Scientific 2020 – Present
AVP – Engineering

Western Digital 2012 – 2020
System Architect, Technologist & Product Line Manager

AMD 2011 – 2012
Senior Design Engineer

Mindtree 2007 – 2011
Module Lead

Freescale (NXP) 2006 – 2007
Design Engineer

Wipro 2004 – 2006
Project Engineer

EXPERTISE

- **ASIC / SoC / VLSI** – spec to GDS
- **AI processors** – edge-AI architecture
- **Verification & validation** – pre- and post-silicon
- **Embedded systems** – bring-up, SDK, boards
- **Tape-out to production** – wafer, OSAT, HVM
- **FPGA prototyping** – PPA trade-offs
- **Storage** – SSD, SD, NVMe
- **Product line management**

SPEAKING TOPICS

- PPA as a product decision: architecting edge-AI silicon
- Spec to silicon to volume: lessons from building AI processors
- Bring-up and verification that catch real integration bugs
- Open hardware and India's deep-tech ecosystem
- Skilling the next generation of semiconductor engineers

ADVISORY, CONSULTING & COACHING

- **Advisor and consultant** – semiconductor and deep-tech startups
- **Non-tech ventures** – startups in the Art and Wellness domains
- **Open for** coaching, mentoring, speaking and advisory engagements

EDUCATION

- **M.S. VLSI CAD** – Manipal University
- **DLP, Embedded Systems** – IIT Powai
- **B.E. Electronics & Telecom** – BIT Durg
- **IIMB, PG in Software Enterprise Management** – batch of 2012 (did not complete)

CONNECT

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