Narasimhan Venkatesh
Ph:+91 9849456036
Email: n.venkatesh.nv@gmail.com

Career Highlights

- 39 years of engineering and management experience
- Technical expert on semiconductors, wireless technologies, connectivity, IoT solutions, and electronic systems
- Successful track record in building and leading product R&D and engineering teams in India for US headquartered companies
- Extensive volunteering and leadership experience at the IEEE, and TiE Hyderabad
- Holder of 22 US patents.
- Fellow of the Indian National Academy of Engineering

Work Experience

Silicon Labs, Hyderabad. 2020 - present	
Company Profile	Headquartered in Austin, Tx, Silicon Labs is the industry leader in wireless IoT semiconductor solutions.
Roles	Present: APAC R&D Lead of Silicon Labs University – a company initiative to foster better R&D and build university and ecosystem collaboration Earlier: Senior Director of Applications Engineering and head of customer enablement on the company's Wi-Fi-Bluetooth combo chips and modules.
Redpine Signals, Hyderabad. 2002 - 2020	
Company Profile	Headquartered in San Jose, California, Redpine Signals, Inc., was a semiconductor and wireless system solutions company acquired by Silicon Labs in 2020.
Roles	Chief Wireless Architect and Sr. VP, Advanced Technologies Responsible for product architecture, wireless systems design, applications engineering, processes and methodologies, customer engagement, recruitment, relationships with educational institutions, and others.
Paxonet Communications, Pune. 1993 – 2002	
Company Profile	Paxonet Communications, later acquired by Conexant, developed semiconductor devices and IP for optical networks and telecom equipment.
Roles	General Manager responsible for development of SONET/SDH layer-1 subsystems and semiconductor IP, and ASIC development – from product definition to tape-out.
Hindustan Aeronautics, Ltd., Bangalore and Hyderabad. 1985 – 1993	
Company Profile	HAL is an Indian public sector company carrying out the design and manufacture of military aircraft and aircraft subsystems.
Roles	Deputy Manager responsible for the design and implementation of secure wireless communication systems and system integration of avionics into helicopters.

Technical Experience Summary

In my current role at Silicon Labs, I work with all the R&D teams – VLSI Design, Analog and RF Design, Wireless Protocols, SoC Platforms, System Validation, SQA and Automation, Product Management, and Product Marketing among others to enhance the technical depth and expertise of the teams and to prepare them for the roadmap. As a subject matter expert on Wi-Fi, I also participate in the IEEE 802.11 standardization efforts on next generation Wireless LAN and in the Wi-Fi Alliance efforts on standardizing Wi-Fi interoperability.

I also work with the University and Industry ecosystem to foster collaboration and run initiatives to better equip students for success in the technology industry. I have helped set up Centres of Innovation in IoT in over ten academic institutions so far. I have been part of the organizing committee of various prestigious international conferences including the Conference on VLSI Design and Embedded Systems (vlsid.org) and the IEEE International Conference on Acoustics, Speech and Signal Processing.

In my previous role, I have established teams working on enabling customer uptake of our wireless MCU products and integration into hundreds of innovative connected systems around the world in the areas of home automation, medical electronics, industrial automation, wearables and consumer products, and smart city solutions among others.

At Redpine Signals, I was responsible for setting up the India Development Centre and to build and technically equip teams for chip design, wireless protocol implementation, product management, marketing, enterprise software solutions for location management, and applications engineering among others.

At Paxonet, I was responsible for building teams for chip design and introducing the IP based chip design flow – among the first in the industry worldwide. I led the design and market introduction of over a dozen chips in the telecom and optical networking areas.

At HAL, I designed and implemented jam-resistant communication systems and also built a custom ASIC for secure ECCM communication – the first such product in the industry.

Volunteering and Leadership Experience with IEEE

I have been a member of the IEEE every year since 2002. And was a member for a short while in the late 1980s. I am currently a member of ComSoc, SPS, IES, TEMS and WiE. I have been an active volunteer for over 15 years holding numerous leadership positions at the Hyderabad Section and beyond.

Publications in Technical Magazines

I have written articles extensively in technical magazines and online technical resources. Some examples below.

http://eetimes.com/design/industrial-control/4014265/Replacing-RS-232-with-802-11n-wireless

http://www.embedded.com/design/connectivity/4008927/The-basics-of-adding-802-11n-wireless-connectivity-to-your-embedded-design

http://www.low-powerdesign.com/article_redpine_100711.htm

http://www.eetimes.com/design/communications-design/4227966/Wi-Fi-in-automation-Add-Wi-Fi-connectivity-to-a-PSoC-design

http://www.wirelessdesignmag.com/blogs/2012/04/why-wi-fi-internet-things-will-move-5-ghz

Technical Lectures and Public Speaking

I have delivered presentations in over 100 conferences, workshops and other events in India as well as abroad including the US, UK, France, Belgium Germany, Italy, Singapore, Israel, Australia, Japan, China, and Canada. My topics have included, among others:

- Low power VLSI Design
- Wireless Technologies
- IoT Technology and Solutions
- Entrepreneurship
- Business Models
- Marketing and GTM strategy
- Communications Principles and Applications
- Standards in Wireless and Networking
- Enterprise Software Systems
- Edge Intelligence

Some presentations were recorded and are available online, including:

- Tutorial at the IEEE International Conference on VLDI Design and Embedded Systems 2023
  - https://www.youtube.com/watch?v=CxhB2K3PzRs
- Online lecture on IoT Technology broadcast on the T-SAT Network
  - Part 1: https://www.youtube.com/watch?v=XcJ-qe6fEl0
  - Part 2: https://www.youtube.com/watch?v=nOZv7xJslLY
- Talk at IEEE ComSoc Summer School 2023
  - https://www.youtube.com/watch?v=zTq7zDZ7_8o
- Technology Talk - Podcast
  - https://www.youtube.com/watch?v=9im4m4ySv4U

Volunteering Experience with TiE, Hyderabad

TiE is a global volunteer-driven organization fostering entrepreneursip and is the world's largest community of entrepreneurs. https://tie.org/

I have been a Charter Member of TiE in Hyderabad for the past 15 years, and have been a Member of the Board for four years. I have led the TiE Young Entrepreneur program here for ten years, and have mentored a number of startups. I also lead classroom sessions for aspiring entrepreneurs on topics such as Business Models, Lean Canvas, Product Market Fit, and Minimum Viable Product.

Standards Bodies

I have been a participant, and voting member, of the IEEE 802.11 Standardization Committee and have been a voting member during the finalization of several versions and extensions of the IEEE 802.11 standard. I am currently active in the TGbn and TGbp task groups.

I have been, and continue to be, an active participant of the Wi-Fi Alliance task groups aimed at bringing interoperability to 802.11 capable devices under the brand name of Wi-Fi.

Academic Qualifications

M.Tech in Communication Systems,
1987 Indian Institute of Technology,
Madras

B.Tech in Electronics and Communications Engineering,
1984 JNTU College of Engineering, Hyderabad

Fellowship and Awards

I am a Fellow of the Indian National Academy of Engineering. INAE describes this as
"The Academy honours Indian and Foreign nationals who are elected by "peer" committees in recognition of their personal achievements in "Engineering" which are of exceptional merit and demonstrated distinctive eminence in the new and developing fields of technology. The total number of Fellows at any one time may not exceed 1000."

I am the recipient of the VASVIK Award for Industrial Research, 2011.

"VASVIK is a non-profit, non-government organisation established in 1974 and run by the Patel Family of Mumbai, who are the owners of the Patel Extrusion Group. Vasvik research awards are presented in categories to scientists and researchers who have excelled in their particular field."