

## Contact

[www.linkedin.com/in/hongyuan-zhang-4253056](http://www.linkedin.com/in/hongyuan-zhang-4253056) (LinkedIn)

## Top Skills

MIMO  
OFDM  
Digital Signal Processors

## Languages

Chinese (Native or Bilingual)  
English (Full Professional)

## Honors-Awards

IEEE 802.11ac Essential Contribution Award  
Superior Innovation and Achievement Awards 2012 and 2013  
IEEE 802.11n Essential Contribution Award  
NC State Graduate School Annual PhD Dissertation Award (one per year)  
IEEE 802.11ah Essential Contribution Award

## Publications

802.11ac Preamble  
Cochannel interference mitigation and cooperative processing in downlink multicell multiuser MIMO networks  
Asynchronous Interference in Cooperative Base Station Systems  
80MHz Transmission Flow  
Fast MIMO transmit antenna selection algorithms: a geometric approach

# Hongyuan Zhang

NXP Fellow, Director of Engineering at NXP Semiconductors  
Santa Clara, California, United States

## Summary

Experiences in wireless system/algorithm/architecture, wireless standardizations

## Experience

NXP Semiconductors  
NXP Fellow, Director of Engineering, Wireless Connectivity  
December 2019 - Present (6 years 4 months)

Joined NXP Through Marvell Wireless Acquisition

- Leading the system team of wireless connectivity group, working on WiFi 802.11b/g/n/p/ac/ax and narrow band systems, covering design, verification, bring-ups and customer engagements. Experience with multiple product cycles incl. both high-end access points and cost-efficient mobile platform & IoT solutions.
- Leading WLAN standard activities. Numerous contributions to recent WLAN standards: IEEE 802.11be/ax/ac/n/ad/ah/af and WiGig. IEEE 802.11n, 802.11ac, 802.11ah and 802.11ax Contribution Awards.
- PHY Co-Chair of IEEE 802.11ax Task Group, Vice Chair of IEEE 802.11bd Task Group (Next Generation V2X)
- 400+ US and overseas patents.
- Member of NXP Wireless Connectivity Patent Committee.

Marvell Semiconductor  
13 years 5 months

Director of Engineering, PHY Systems, Wireless Connectivity  
January 2015 - December 2019 (5 years)  
Santa Clara, CA

Wireless Business Acquired by NXP, Dec 2019

Principal Engineer  
August 2006 - December 2019 (13 years 5 months)  
Santa Clara, CA

PHY system algorithm design, verification and bring-ups, wireless standards

Mitsubishi Electric Research Labs

Research Intern

May 2005 - August 2006 (1 year 4 months)

802.11n standard contributions on the antenna selection technology, Wimax  
802.16e/j/m system study and standard contributions, research topics on  
cooperative communications, cognitive radios, authored 8 pending US and  
oversea patents.

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## Education

BS, Electrical Engineering

North Carolina State University

PhD, Electrical Engineering