

Zhibo Pang



HIGHLIGHT

Keywords: Embodied Intelligence, AI/LLM/LFM/Machine Learning, Robotics, Cloud-Fog Automation, Cyber Physical Systems, Cybersecurity, Functional Safety, Industry4.0, Healthcare4.0, Internet-of-Things, WirelessHP, Cloud/Edge Computing, Control System, Wireless communication, System-on-Chip, FPGA/ASIC, Process automation, Power grids, Biomedical Informatics

Facts: 23 granted patents in US/EU/JP, 120+ journal papers, 60+ conference papers, 40+ invited talks, 2 edited proceedings, Google Scholar citation 9000+, h-index 46

EDUCATION

PhD (Electronic and Computer Systems), KTH Royal Institute of Technology, Stockholm, Sweden, 2013.7

MBA (Innovation and Growth), University of Turku, Turku, Finland, 2012.10

B.Eng (Electronic Engineering), Zhejiang University, Hangzhou, China, 2002.6

EXPERIENCE

Senior Principal Scientist (2019.10-present), **Principal Scientist** (2017.8-2019.9), **Senior Scientist** (2016.1-2017.7), **Scientist** (2013.07-2015.12), **Associate Scientist** (2011.8-2013.07), ABB Corporate Research, Vasteras, Sweden

Adjunct Professor (on Industrial Wireless Communication), Department of Intelligent Systems, KTH Royal Institute of Technology, Stockholm, Sweden, 2021.11-present,

Adjunct Professor (on Industrial IoT), School of Electrical and Information Engineering, University of Sydney, Sydney, Australia, 2019.2-2023.1

Start-up Entrepreneur/Co-founder, Shanghai Shengyue Electronics Tech Co. Ltd. (China, 2007.7-2008.7), and Ambigua Medito AB (Sweden, 2008.8-2009.9)

Department Manager (2004-2007.07), **Project Leader and Product Manager** (2003-2004), **Chip Design Engineer** (2002.07-2003), Nationalchip Sci&Tech Co. Ltd., Hangzhou, China

HONORS

My PhD student, Honghao Lyu, won the Best Student Paper Finalist Award in the 16th International Conference on Intelligent Robotics and Applications (ICIRA2023), Hangzhou, China, Jul, 2023.

Runner-up Award, ABB Process Automation Global HackSummit 2022, “Fog-hosted level-1 control”, team leader and main contributor, there were 6 Winners and 4 Runner-ups out of 62 teams, Nov 23-24, 2022.

My PhD student, Honghao Lyu, won the IES Young Professionals & Students Paper Assistance at the 48th Annual Conference of the IEEE Industrial Electronics Society (IECON2022), Oct 18-22, 2022, Brussels, Belgium, [video](#)

“2021 Inventor of the Year Award”, ABB Corporate Research Sweden

“2018 Inventor of the Year Award”, ABB Corporate Research Sweden

“2016 Inventor of the Year Award”, ABB Corporate Research Sweden

Outstanding Paper Award, for “An In-home Medication Management Solution Based on Intelligent Packaging and Ubiquitous Sensing” at the IEEE International Conference on Advanced Communications Technology (ICACT). Jan 2013, Pyeongchang, Korea

INDUSTRY FUNDED PROJECTS

Most of my research was funded by ABB internally. Project details cannot be provided in this public document. Total funding is 800+M EUR.

PUBLIC FUNDED PROJECTS

Co-PI, Swedish Wireless Innovation Network (SweWIN), 90M SEK, funded by Swedish Innovation Agency

(VINNOVA), 2024.01-2028.12

PI, APR20-0023: Making the wireless critical control safe and resilient, funded by Swedish Foundation for Strategic Research (SSF), 1 500 000SEK, 2021.05-2027.04

Senior Member (responsible for strategy and IPR), PRJ-7646: ABB part of the H2020 project 5G SMART – 5G for smart manufacturing (<https://5gsmart.eu/>), 1 500 000USD, 2019.06-2021.12

PI, VINNOVA 2015-06548: Ultra-High Performance Wireless Communications for Industrial Applications, funded by Swedish Innovation Agency (VINNOVA), 190 500SEK, 2016.01-2017.06

PI, VINNOVA 2017-02822: Ultra-Reliable Low Latency Wireless Communications for Industrial Digitalization, funded by Swedish Innovation Agency (VINNOVA), 296 000SEK, 2017.08-2018.01

APPOINTMENTS IN ACADEMIC COMMUNITY

Standing Committee Member, IEEE IES Industry Activities Committee, 2020-present

Steering Committee Member, IEEE Internet of Things Technical Community (IoT-TC), 2023-2025

TC Chair, IEEE IES Technical Committee on Cloud and Wireless Systems for Industrial Applications, 2025-present

TC Vice-Chair, IEEE IES Technical Committee on Cloud and Wireless Systems for Industrial Applications, 2023-2024

TC Co-Chair, IEEE IES Technical Committee on Industrial Informatics, 2017-present.

Member, Industrial Wireless Technical Working Group (IWSTWG), National Institute of Standards and Technology (NIST), U.S. Department of Commerce, 2017-present

Award Committee Member, IEEE Technical Committee on Cyber-Physical Systems, 2020-2020

Chair of Sub-TC, Sub-TC on Industrial Internet of Things Services and People, IEEE IES Technical Committee on Industrial Informatics, 2015-2020,

Vice-Chair of Sub-TC, Sub-TC on Internet of Things Optimization, IEEE IES Technical Committee on Cloud and Wireless Systems for Industrial Applications, 2015-2016,

EDITORIAL SERVICE

Associate Editor, IEEE Transactions on Industrial Informatics (TII), 2016-present.

Associate Editor, IEEE Journal of Biomedical and Health Informatics (JBHI), 2017-present.

Associate Editor, IEEE Journal of Emerging and Selected Topics in Industrial Electronics (JESTIE), 2019-present.

Associate Editor, IEEE Internet of Things Magazine (IoTM), 2024-present

STANDARDIZATION SERVICE

Founding Member, Working Group for IEEE P3388 (former IEEE P1451.5p): Standard for Radio Frequency Channel Specifications for Performance Assessment of Industrial Wireless Systems, 2021-present

Member, Working Group for IEEE P2805.1: Self-Management Protocols for Edge Computing Node, 2020-present

Member, Working Group for IEEE P2805.2: Data acquisition, Filtering and buffering Protocols for Edge Computing Node, 2020-present

Member, Working Group for IEEE P2805.3: Cloud-Edge Collaboration Protocols for Machine Learning, 2020-present