Howard E. Michel, Ph.D.

WB2ITX

UBTech Robotics

19th Floor, Block C1, Nanshan i-Park

No. 1001 Xueyuan Road, Nanshan District

Shenzhen City, 518055

People's Republic of China

45 Christine Drive

North Dartmouth, MA 02747-5107

USA

Cell: +86 159 1412 2560 Cell: +1 508 264 3930 howard.michel@ubtrobot.com h.michel@ieee.org

Skills

- Skilled problem solver, able to formulate and implement innovative strategies and solutions to difficult challenges, across a broad range of technologies.
 - ➤ As CEO Guided major non-profit Board through significant change.
 - ➤ As CTO Built a company in China from startup to \$100 million valuation.
- ❖ Proven team builder and skilled leader, delivering optimal solutions on schedule and within budget for corporate, military, academic, and global volunteer organizations.
 - ➤ As COO Successfully launched seven satellites in the U.S. and China.
 - ➤ As SVP Successfully managing a \$30 million profit and loss center.
- ❖ Effective communicator, able to explain complex technology to TV and press reporters, policy and decision makers, and students.
 - ➤ Interviewed by BBC World News (78 million viewers), India's *The Economic Times*, and *The Nikkei*, the world's largest financial newspaper.
 - Led technology policy discussions with cabinet ministers in Japan, China, Taiwan and Singapore; senior government leaders in South Africa, India and Nepal; and senior leaders of international corporations in Germany, Japan, India, China, Taiwan and Silicon Valley.

Relevant Professional Experience and Accomplishments

- Senior Vice President, UBTech Robotics, a \$4 billion international robotics company based in Shenzhen, China
 - ➤ Managing a \$30 million profit and loss center, including R&D, sales, marketing, and branding for three domestic product lines and three international product lines.
- ❖ Chief Technology Officer (CTO) and co-founder, UBTech Education, an international educations solutions company based in Shenzhen, China
 - > Successfully aligned technical strategy and business strategy, taking company from startup to estimated \$100 million valuation.
 - > Successfully created products, built engineering teams, and developed international research partnerships.

- ❖ Director of Operations (COO equivalent), Satellite Launch Director, 2nd Space Launch Squadron, U.S. Air Force one of two U.S. military space launch organizations
 - ➤ Directed launch-base test and integration, systems engineering, and program management involving rocket, satellite, and world-wide telemetry range hardware, including pre-launch testing and launch countdown.
 - Established position, defined roles and responsibilities. Streamlined operations; cut duplication and improved reliability. Successfully took satellite launching out of research and development, and made it operational.
 - Successfully launched five satellites.

IEEE Experience and Accomplishments (volunteer positions)

Institute of Electrical and Electronics Engineers – IEEE is a volunteer led 501(c)3 association advancing technology for the benefit of humanity.

❖ 2015 IEEE President & CEO

- Worked synergistically with the Executive Director to manage a \$400 million annual international business that operates over 1800 conferences, maintains 1300 active standards, 180 top-cited publications, and is organized into 46 technical societies and councils, 334 local sections, and 430,000 members worldwide.
- ➤ Guided the IEEE Board through a significant and controversial change to IEEE policy on the use of patents in IEEE standards such as 802.11, the basis for Wi-Fi.
- ➤ Envisioned and led the IEEE Board in developing "IEEE in 2030" goals long range goals in organization, products, technical communities, and public imperatives.
- Created a model for industry outreach bringing IEEE and the professional workforce together to create new products and services.
- ➤ Expanded IEEE's global footprint initiated first office in Europe and opened second office in China.
- ❖ 2011-2012 IEEE Vice-President Member and Geographic Activities, Chair of the Member and Geographic Activities Board
 - ➤ Set policy and provided oversight for IEEE activities globally, successfully growing membership outside the U.S.
 - > Set direction to revitalize and reinvent local sections such that they provide focus on individual members and their unique needs.
 - Established Metropolitan Area Workshops, a new program for IEEE, providing value to working engineers.
 - Managed \$66 million annual dues budget, and several thousand volunteers worldwide.

Work Experience

- Private-sector Positions
 - ➤ Senior Vice President UBTech Robotics (1/18 present)
 - ➤ Chief Technology Officer UBTech Education (11/16 12/17)
- Military Positions
 - ➤ Consultant, Navy Underwater Warfare Center (5/04 –11/16)

- \triangleright Senior Engineering Manager, Air Force Systems/Material Command (6/91 3/94)
- ➤ Senior U.S. Government Technical Representative in China (Periodic, 12/89 8/92)
- ➤ Satellite Launch Director, Air Force Systems/Space Command (12/86 6/91)
- ➤ Engineer, Engineering Manager, Air Force Systems Command (7/81 12/86)
- ightharpoonup Pilot, Air Force (10/76 7/81)

University Positions

- ➤ Visiting Professor, Department of Electrical and Electronic Engineering Science, University of Johannesburg, Johannesburg, South Africa (5/16 present)
- ➤ Associate Professor, Electrical and Computer Engineering Department, University of Massachusetts Dartmouth, Dartmouth MA, USA (9/05 5/16)
- ➤ Assistant Professor, Electrical and Computer Engineering Department, University of Massachusetts Dartmouth, Dartmouth MA, USA (9/99 9/05)
- ➤ Full-Time Visiting Lecturer, Computer Science Department, University of Dayton, Dayton, OH, USA (8/97 5/99)

Board Experience

- ❖ Institute of Electrical and Electronics Engineers IEEE
 - > Seven years in leadership roles on the IEEE Board of Directors, including President, President-Elect, Past-President, Vice-President Member and Geographic Activities, and Region Director.
- United Engineering Foundation, an \$18 million foundation supporting engineering and education.
 - > Trustee, 2015-present
 - ➤ Board Vice-Chair, 2016-present

Education

- Ph.D. Computer Science and Engineering Wright State University, Dayton OH, 1999
- ➤ M.S. Electronic and Computer Engineering University of Massachusetts, Amherst MA, 1988
- M.S. Systems Management University of Southern California, Los Angeles CA, 1981
- ➤ B.S. Electronic Engineering (cum laude)
 New Jersey Institute of Technology, Newark NJ, 1975

Miscellaneous

Extra Class amateur radio license WB2ITX (licensed 50 years)