

# Curriculum Vitae

## Dr. Zorica Pantić

*Strategic leader with a proven record of change management in higher education; collaboration with industry, not-for profit organizations and community organizations; and service at the regional, state, and national levels.*

### LEADERSHIP POSITIONS AND ACCOMPLISHMENTS

#### President, Wentworth Institute of Technology (WIT)

2005 - present

- Providing leadership to 4,100 students and 516 full-time faculty and staff, and managing \$130-million operational budget. Raised \$45 million for student and faculty support as well as bricks & mortar -- including a single \$10-million gift, the largest in the Institute's history. Through enhanced recruitment efforts, increased overall enrollment by 17%, from 3,500 to 4,100 students; increased SAT scores from 1,056 to 1,106 and through proactive support programs increased six-year graduation rate from 46% to 64%.
- Improved quality and visibility of the programs that led to many outstanding rankings
  - #13 in the North Region by *U.S. News & World Report*
  - among the best colleges in the Northeast by the Princeton Review
  - among the top 10% in the U.S. in terms of return on investment (ROI) by [payscale.com](http://payscale.com)
  - among the top 7, out of 4,500 colleges and universities in the U.S., for the graduates' occupational earnings potential by the Brookings Institution
  - The Carnegie Foundation has recognized Wentworth for service and engagement and the Institute has been on the U.S. President's Honor Roll for Service for the last 6 years. Wentworth's education is really a model for the education of the future and supports the Institute's standing as a school of opportunity.
- Supporting Wentworth's mission to empower, inspire and innovate through experiential learning and implementing the Institute's vision to become a university of choice for Externally-collaborative, Project-based, Inter-disciplinary Culture (EPIC) for learning.
- Championing academic excellence model that integrates inter-disciplinary, project-based curriculum with real-world experience through Wentworth's hallmark co-op program, service learning projects and external collaboration with industry and not for profit organizations. The experiential approach helps students learn by doing and leads to their career success -- from getting that great first job to being successful throughout their careers. Six-month placement rate (jobs and graduate school) is 98% for the class of 2015. The starting salaries of Wentworth graduates are ranked by [Payscale.com](http://Payscale.com) among the top 10 in the New England region and the engineering alumni salaries among the top three in Massachusetts.
- To meet industry needs, started six new undergraduate engineering programs (biomedical, civil, computer, electrical, mechanical and interdisciplinary engineering) becoming a predominantly engineering institution. Received a \$500k NSF grant to increase engineering students' retention rate and a \$200k NSF grant for lab improvement. Started the first 3-year undergraduate program in applied mathematics

and the first inter-disciplinary undergraduate program in computer information systems. Transformed the Academic division from a departmental structure into four colleges.

- Fostering innovation and entrepreneurship through the newly launched Accelerate program for undergraduate students. Students are mentored by outside experts to help them turn their ideas into reality. Wentworth awards start-up funds to top 3-4 ideas that win the highest ranking by the panel of outside experts.
- Established 6 graduate level programs - Masters of Architecture; Masters of Science in Construction Management, Masters of Science in Facility Management; Masters of Science in Technology Management; Masters of Engineering in Civil Engineering; and Masters of Science in Applied Computer Science – making Wentworth a **graduate-degree granting institution**. Excellent enrollment, far beyond the established targets, is the testimony to the high quality of the programs.
- Established Wentworth Online that offers both undergraduate and graduate programs in the online format – have students from 15 different states.
- Oversaw the construction of major capital projects -- the Flanagan Campus Center (\$20M), the Center for Sciences and Biomedical Engineering (\$20M), Apartments at 525 Huntington Ave upperclassmen residence halls (\$49M); Library and Beatty Hall Renovation (\$25M). Planning an 80,000-SF Multipurpose Academic Building (estimated cost \$52M).
- Established effective outreach programs to increase and diversify the student pipeline. Developed articulation agreements with community colleges and two-year institutions such as Benjamin Franklin Institute of Technology in Boston. Started the Urban Massachusetts Louis Stokes Alliance for Minority Participation program (jointly with the University of Massachusetts - Boston, as a lead, Dartmouth, and Lowell campuses - and four neighboring community colleges) which is supported by a \$950,000-National Science Foundation grant; established summer STEM discovery programs, collaborated with the Girl Scouts of Patriot's Trail, MA, and developed mentoring and tutoring programs at O'Bryant High School.

#### **Founding Dean of the College of Engineering, University of Texas at San Antonio (UTSA)**

**2001 - 2005**

- Spearheaded College efforts toward achieving **doctoral/research status** for UTSA by developing and implementing 3 doctoral programs: Electrical Engineering; Biomedical Engineering (jointly with the UT Health Science Center), and Environmental Science and Engineering (jointly with the College with Sciences), with the enrollment that grew to 50 doctoral students over a 3-year period. Also established an MS in Computer Engineering program.
- Hired 25 highly qualified and diverse faculty members. Established new faculty orientation, mentoring programs, and research workshops. Increased research funding 10-fold to \$7 million in active grants. Many of the faculty received prestigious awards such as the NSF Young Investigator Award.
- Expanded the undergraduate engineering programs in quality, size and visibility, which resulted in a ranking by *US News & World Report* among the top 50 programs in non-PhD institutions.

- Implemented new recruitment and retention programs that resulted in 75% undergraduate enrollment increase (83% increase in female student population). The graduate student credit hours increased by 70%. Secured a \$200,000-block grant from the National Action Council for Minorities in Engineering (NACME) for engineering student scholarships. Worked with San Antonio College on securing a \$700,000-NSF grant to recruit more underprivileged students into engineering.
- As the founding dean, worked with the faculty and Department Chairs on establishing departmental structures and budgets, college by-laws and committees, and research and merit policies. Worked efficiently with the university administration to increase the College budget from \$3.8 million in FY 2001-2002 to \$6.2 million in FY 2004-2005 (exclusive of grants and endowments) with the total budget approximately \$12 million.
- Developed successful relationships with an array of industry partners ranging from national companies to small businesses and research centers. With the UT Health Science Center (UTHSC) and Southwest Research Institute (SwRI) received a joint NSF grant for Interne2. Secured a 5-inch MEMS production-line equipment donation from Sony, Inc., valued at \$2 million. Secured nano-equipment donation from Zyvex company worth \$250,000. Served on the Toyota Education Committee to bring Toyota to San Antonio and received a Toyota NACHI production line robot valued at \$75,000. Served as the primary investigator on a \$970,000 AFOSR grant to establish a UTSA Material Science and Engineering Laboratory at Kelly USA (former Kelly AFB) and conduct related research and educational programs.
- Served on the Technology Council of the Greater San Antonio Chamber of Commerce and was recognized as the 2003 Woman Entrepreneur of the Year by the San Antonio Women's Chamber of Commerce. Served on the Austin-San Antonio Corridor Council for Nano-Biotechnology.
- As a member of the Executive Committee of the Texas Engineering and Technology Consortium, worked with fellow Texas deans and industry representatives to secure \$3 million in federal funding and \$3 million in matching state funding to help increase the number of engineering graduates in the state.

**Director of the School of Engineering and Computer Science, San Francisco State University (SFSU)**

**1997 - 2001**

- Through strong and effective leadership, improved the engineering programs in quality, size (10% enrollment growth) and visibility, resulting in the programs being ranked among the top 50 undergraduate programs by *US News & World Report* for the first time in SFSU history. Initiated a new BS in Computer Engineering program.
- Enhanced SFSU engineering graduate program by strengthening the environmental engineering area and introducing the wireless communications area. Performed extensive assessment of the master's level programs and implemented appropriate improvements
- Institutionalized MESA Engineering Program (MEP), formerly the Minority Engineering Program and in collaboration with the Math and Computer Science departments chairs secured a \$220,000 NSF Computer Science, Engineering and Mathematics Scholarships (CSEMS) grant to support disadvantaged students. Worked with Caltrans

(CA Transportation) to bring the Summer Institute program for high school students to the SFSU campus.

- Established a Center for Applied Electromagnetics with diverse research ranging from analysis and design of printed circuit boards (PCBs) and electromagnetic interference (EMI) and electromagnetic compatibility (EMC), to calculation of optical properties of biological macromolecules such as proteins and DNA. Received research grants from leading high-tech corporations such as Lockheed Martin and Pacific Gas & Electric, and federal agencies such as the National Security Agency and National Science Foundation.
- Played a crucial role in shaping and implementing the \$480,000 SFSU-Cañada “Pathways” partnership through which San Francisco State offers upper-division engineering courses on the campus of a regional community college. This project served as a blueprint for cooperation between the 23-campus California State University (CSU) system, of which San Francisco State is member, and California’s community colleges.
- Worked with the CSU engineering deans on the California Workforce Initiative to increase funding for strategic disciplines: agriculture, biotechnology, computer science, engineering, and nursing. This initiative resulted in the Strategic Workforce Program that provided \$10 million to the California State Universities in the academic year 2000/2001; SFSU’s share was \$332,000.

**Fulbright Postdoctoral Fellow, University of Illinois at Urbana Champaign (UIUC)**

**1984 - 1989**

- Brought the expertise in the finite element method (FEM) and its application to different electromagnetics problems. Taught a group of M.S. and Ph.D. students how to apply the FEM for numerical modeling of microwave (MW) transmission lines (TL) and high-speed digital circuits - three of the students are now professors at prestigious universities. Developed sophisticated FEM software packages for TL analysis and design, and re-wrote FEM codes for parallel computing on supercomputers such as Cray. Over the years, contributed to the FEM theory by developing a number of special finite elements such as nodal-based infinite and singular elements and 2-D edge-based singular elements.

**Assistant/Associate Professor of Electrical Engineering, University of Niš, Serbia**

**1975 - 1987**

- Developed a successful educational and research program in the area of applied electromagnetics with emphasis on antenna design and microwave circuit design

**EDUCATION**

Harvard Institute for Experienced Presidents, Harvard University, Cambridge, USA, 2010

Harvard Institute for New Presidents, Harvard University, Cambridge, USA, 2005

Ph.D. in Electrical Engineering, University of Niš, Serbia, 1982.

M.S. in Electrical Engineering, University of Niš, Serbia, 1978.

B.S. in Electrical Engineering, University of Niš, (Best Graduate – ranked #1), Serbia, 1975.

## **BOARD & COUNCIL MEMBERSHIPS**

Massachusetts STEM Advisory Council, co-chair of Diversity Subcommittee, appointed by the Governor, 2009 – 2014

Massachusetts Workforce Investment Board, appointed by the Governor, 2008 – present

Boston Private Industry Council (PIC), 2012 - present

New England Association of Schools and Colleges – Accreditation Agency, member of the Board of Directors, Compensation Committee, 2009 - 2015

Association of Independent Colleges and Universities of Massachusetts (AICUM), Board of Directors, 2007 – 2010

Medical, Academic and Scientific Community Organization (MASCO), Board of Directors, Member of the Governance Committee, 2005 – present

The Fenway Alliance, Board of Directors, 2005 – 2010

Colleges of the Fenway Consortium, Board of Directors, 2005 – present, Board Chair 2010 - 2012

Boston University, Women in Science and Engineering, Advisory Board, 2006 - 2010

American Association of University Presidents of Independent Colleges and Universities (AAPICU), Board Member, 2008 - present

World Association for Cooperative Education (WACE), Board & Executive Committee member, 2012 - present

National Council on Cooperative Education (NCCE), Board & Executive Committee member, 2007 -2012

Institute of Electrical and Electronic Engineering, Electromagnetic Compatibility Society, Board of Directors, Education Committee, 2002 – 2004

Austin-San Antonio Corridor Council for Nano-Biotechnology, 2002 - 2005

Greater San Antonio Chamber of Commerce, Technology Council, 2001 – 2005

Texas Engineering and Technology Consortium (TETC), Executive Committee, 2001 - 2005

ACCESS Advisory Committee, San Antonio College, 2003 – 2005

Hyper Corporation (wireless and Bluetooth interoperability), Board of Directors, 2001- 2004

American Society for Engineering Education (ASEE), Pacific South West (PSW) Section, Board of Directors, 2000 – 2001

San Francisco State University (SFSU), Global Learning Center, Board of Directors, 2000-2001

SFSU Romberg Tiburon Center for Environmental Studies, Advisory Board, 1999 – 2001

Cañada Community College - SFSU Pathways Project (funded by \$1-million CA Governor's grant), Advisory Council, 2000

Math, Engineering and Science Achievement (MESA) Program, Cañada Community College, Advisory Council, 2000 -2001

## **PROFESSIONAL SERVICE - SELECTED**

### **Massachusetts Water Resource Authority**

Chair, Expert Panel on 2011 Catastrophic Water Main Failure

### **National Academy of Engineering**

Member, National Advisory Committee, Engineering Equity Extension Service Project, 2005 - 2009

Member, NAE Workshop on Cooperation community colleges and 4-year universities, 2004

### **National Science Foundation**

Member, NSF Committee of Visitors, Major Research Instrumentation program, 2006

Member, NSF Workshop on Engineering CyberInfrastructure, 2004

Member, NSF Review Panel for Engineering Education Reform Program, 2002

Member, NSF Review Panel for CCLI Program, 2001

### **New England Association of Schools and Colleges**

Accreditation evaluator, 2006

### **Corporations**

Member, Board of Directors, Hyper Corporation, 2001- 2004

### **Institute of Electrical and Electronic Engineers**

Member, Board of Directors, IEEE Electromagnetic Compatibility Society, 2002 - 2004

Member, International IEEE EMC Education Committee, 1997 – 2005

Member, International IEEE EMC University Grant Committee, 1997 – 2005

Vice Chair, Numerical Modeling Committee (TC-9), International IEEE EMC Society, 1997 – 2002

IEEE Santa Clara Valley (SCV) Chapter of the EMC Society

Chair, 1999/2000; Vice Chair, 1998/1999; Treasurer, 1997/1998; Secretary, 1996/1997

Treasurer and Member, Executive Committee of the EMC'98 Colloquium, Santa Clara, June, 1998

Reviewer, IEEE Trans. on Antennas and Propagation, IEEE Trans. On Microwave Theory and Techniques, and IEEE Trans. On Electromagnetic Compatibility

Reviewer, IEEE professional conferences and symposiums: IEEE EMC Symposium, IEEE AP-S/URSI Symposium, ETRAN, TELSIS.

### **American Society for Engineering Education**

Member, Benjamin Garver Lamme Award Committee, 2013 - present

Member, Board of Directors, ASEE Pacific South West (PSW) Section, 2000 – 2001

Member, ASEE Projects Board, 2004 – 2011

Member, ASEE Contact Committee 2004 – 2011

### **American Council on Education**

Executive Leadership Commission 2006 - 2009