iNEER Award Nomination Dossier

Nominator Information:

Name:	Frank H.P. Pao
Title:	Professor
Affiliation:	The Catholic University of America
Address:	Department of Civil Engineering, The Catholic University of America, 620 Michigan Ave. NE, Washington, DC 20064, USA
Email address:	pao@cua.edu
Telephone:	202-319-6142
Fax:	202-319-6677

Nominee Information:

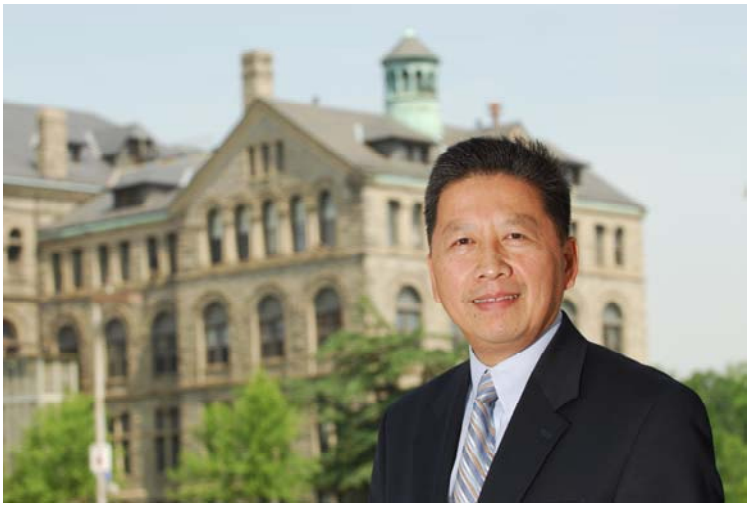
Name:	Charles C. Nguyen
Title:	Professor and Dean
Affiliation:	The Catholic University of America
Address:	School of Engineering, The Catholic University of America, 620 Michigan Ave. NE, Washington, DC 20064, USA
Email address:	nguyen@cua.edu
Telephone:	202-319-5160
Fax:	202-319-4499

Category of Award: Leadership Award

Suggested Citation (15 words or less): For His Visionary Leadership and Contribution to Promote International Academic and Research Collaboration in the Engineering Global Market.

Will Nominee Be Present at Awards Ceremony?: Yes

Summary of Accomplishments:



Charles C. Nguyen was born in Vietnam. He received Diplom Ingenieur. in Electrical Engineering from Konstanz University, Germany in 1978, M.S. and D.Sc. in Electrical Engineering from George Washington University, Washington, D.C. in 1980 and 1982, respectively. During 1982-1987 and 1987-1992, he was an assistant professor and associate professor of electrical engineering at The Catholic University of America. He was promoted to full professor of electrical engineering and computer science at CUA in 1992. Dr. Nguyen served from 1997 to 2001 as Chairman of Department of Electrical Engineering and Computer Science, and as Dean of School of Engineering since 2001.

Dr. Nguyen has been honored with the Research Initiation Award from the Engineering Foundation, the NASA/ASEE Fellowship Awards, and the Life-Time Achievement Award from the World Automation Congress in 2004. His professional contributions include serving as Founder and founding Editor of the International Journal of Intelligent Automation and Soft Computing (AutoSoft), Associate Editor of the International Journal of Computers and Electrical Engineering, member of the Editorial Board of the Journal of Intelligent and Fuzzy Systems, and member of the Advisory Board of the Vietnamese Association for Computing, Engineering Technologies and Science (VACETS). He has recently been honored with California Legislative Assembly Resolution Award (Aug 2006) and Community Service Award from Vietnam American Medical Research Foundation (VAMRF, Feb 2007).

On May 17, 2004, President George W. Bush appointed Dr. Charles C. Nguyen to the Board of Directors of the Vietnam Education Foundation. VEF is an independent U.S. federal agency created to strengthen the scientific, engineering, medical, and technology communities of Vietnam through educational exchange and scientific and technical cooperation. In the past two years, VEF counted more than 150 Fellows studying at top universities across the U.S. in a wide range of science and technology fields.

Dr. Nguyen has been heavily involved in promoting international networking for engineering education and research since he became the dean of engineering at CUA in 2001. In the past two years, he has traveled to Vietnam, Taiwan, China, Hong Kong, Singapore and Malaysia, forging

relationships with university presidents and faculty and crafting memoranda of understanding with many engineering institutions. At each school, Dr. Nguyen met with university presidents as well as deans and engineering professors, offering presentations about CUA, its academic programs and partnership opportunities to each school. The partnership would include semester-abroad options and dual-attendance programs such as 2+2 bachelor program, with two years of study at CUA and two years at a partner school, and programs enabling a student to simultaneously receive a bachelor's degree from one university and a master's degree at the partnering university, known as a 4+1 bachelor's/master's program. The partnership will also encourage faculty collaborations between schools, including sabbatical leaves and joint-authorship of academic papers. Starting next January, first group of CUA juniors will be studying one semester at Hong Kong Polytechnic University in Hong Kong, and at the same time, a group of students from that university will spend one semester here at CUA. Exchange program with Nanyang Technological University in Singapore will commence in the following year. The dean is planning to visit Belgium, India, Thailand and Korea in the coming year for further international collaborations. Dr. Nguyen is always forward looking for engineering education. "We need to look to the future and prepare for that," Dr. Nguyen says. "We are going to train our students to not only become competent engineers, but also to have great potential to become managers and leaders in the engineering global market."

As a board member of the Vietnam Education Foundation, he traveled to Vietnam in March 2005 with a delegation of nationally prominent members and academicians including the Nobel Laureate Harold Varmus, former NIH director. They visited about 15 universities and research organizations in Saigon and Hanoi as sites for potential establishment of World Bank financed centers of excellence. During the last several visits to Vietnam, Dr. Nguyen worked with numerous universities on their academic programs. During the June 2005 trip, he also signed a memorandum of understanding (MOU) with Saigon Technology University (STU) and recently with International University, Vietnam National University (HCMIU) in Ho Chi Minh City. This agreement laid a foundation for CUA's School of Engineering to collaborate with STU and HCMIU in terms of academic programs and research activities. As a result of the signed MOUs, agreements were signed between CUA and HCMIU and Fu Jen Catholic University (FJCU) in Taiwan for 2+2 programs to allow students from HCMIU and FJCU to come to study in a degree program at CUA. In summary, thanks to Dean Nguyen's leadership, Asian students from Vietnam, Taiwan, China, Singapore and Malaysia, etc., will now have an opportunity to study in the U.S. and American students from CUA a chance to be immersed in globalization via various academic programs such as 2+2 and student exchange programs he established in the last several years as a dean and as a presidential appointee (member of VEF Board of Directors).

Dr. Nguyen's research interests include medical robotics, space robots, linear time-varying systems, decentralized control, intelligent systems, robotics, fuzzy-logic control and robot vision. His research was continuously supported by NASA, US-Army, JPL and robotic industries for many years.

Include Letters of Support Here

International Network for
Engineering Education and Research

Budapest, July 3, 2007.

To Whom It May Concern

Letter of support for Charles C. Nguyen for his nomination for the iNEER Leadership Award.

I have known Dr. Nguyen for about 20 years. Through my contacts with Dr. Nguyen and his closest collaborators, I learned that he has a generous, wholesome personality and he is highly engaged in engineering education, especially in training engineers for the global market.
Since he became the dean of engineering at the Catholic University of America (CUA) in 2001 he has visited several foreign engineering institutions and met several university presidents, deans and engineering professors while promoting international networking for engineering education and research.
As a result of his work, starting next January, CUA students will be studying at Hong Kong Polytechnic University in Hong Kong, and students from that university will be studying at CUA. Furthermore, exchange program with Nanyang Technological University in Singapore will commence in the following year.
Dr. Nguyen is a board member of the Vietnam Education Foundation appointed by President George W. Bush and during his visits to Vietnam he has developed close relations with numerous universities and research organizations. In June 2005 he signed an agreement with the Vietnam National University (HCMIU) about collaboration with CUA in terms of academic programs and research activities.
He is recipient of numerous awards and honors including Engineering Foundation Research Initiation Award, the CUA Academic VP Research Excellence Award and the Lifetime Achievement Award from WAC.
He was program chair and vice-chair of several international conferences and he was member of organizing committees of numerous international major conferences.

Consequently, it is my great pleasure to highly recommend Dr. Nguyen for the iNEER Leadership Award. This prestigious honor would be a recognition of his positive impacts on international engineering education and research. In my opinion his professional experiences, his contributions to engineering and his undertakings confirm that he deserves to own this title.

Prof. Dr. Imre J. Rudas
Rector of Budapest Tech

MIDWEST UNIVERSITIES CONSORTIUM FOR INTERNATIONAL ACTIVITIES, INC.

Executive Office ● 4700 S. Hagadorn, Suite 150 ● East Lansing, Michigan 48823-6808
Telephone 517.432.0661 ● Fax 517.432.4457 ● Email mucia@msu.edu

3 July 2007

Professor Frank H. P. Pao
Department of Civil Engineering
The Catholic University of America
620 Michigan Ave., N. E.
Washington, D. C. 20064

Dear Professor Pao:

I am pleased to support the nomination of Dr. Charles C. Nguyen, Professor and Dean of the School of Engineering, The Catholic University of America, for the 2007 Leadership Award of the International Network for Engineering Education and Research (iNEER). I am writing to support this nomination in my leadership role of the Midwest Universities Consortium for International Activities, Inc. (MUCIA). For more than 40 years, MUCIA, a coordinating organization, has represented a number of large U.S. research-intensive universities involved in providing educational and technical assistance to select universities, governments and private sector organizations in locations around the world.

During our acquaintance, Dr. Nguyen and I have had numerous opportunities to explore our mutual interests in the importance and benefits of promoting international education and linkages.

It is my perspective that the scope and depth of Charles Nguyen professional achievements as well as his visionary implementation of activities designed to expand and enhance academic and research institutional activities in multiple international locations make him an ideal candidate to receive the iNEER Leadership Award. Dr. Nguyen has established a distinguished record as a teacher, scholar and administrator of engineering programs as well as public diplomacy. His personal and professional understanding of the importance of strengthening linkages of educational institutions within a global context has been translated into the implementation of a range of educational activities and programs in engineering that benefit faculty, students, administrators, private and public organizations as well as the welfare of the larger society.

For the reasons referenced therein I enthusiastically endorse the nomination of Dr. Charles C. Nguyen for the Leadership Award iNEER.

Sincerely,

Philip R. Smith
President and Executive Director
MUCIA, Inc.
4700 S. Hagadorn Rd, Suite 150
East Lansing, MI 48823
Phone: 517.432.0661
Fax: 517.432.4457

The University of Texas at San Antonio
College of Engineering
Department of Electrical and Computer Engineering

TO WHOM IT MAY COCNERN July 5, 2007

Re: ICEE Award Nomination of Professor **Charles C. Nguyen**

I am writing this letter in support of the nomination of Dr. Charles C. Nguyen, Professor of Electrical and Computer Engineering and Dean of School of Engineering at the Catholic University of America (CUA) for the Leadership Award at the ICEE-2007 conference to be held at University of Coimbra, Portugal in September 2007. I have known Professor Nguyen since 1986 as co-authors, co-organizers of international conferences, co-editors of journals and books, co-researchers, etc. I should indicate that I am often asked about expressing my opinion about the qualification of many peers around the world. I consider writing this letter as an important part of my professional activities.

Prof. Nguyen is internationally known for his many contributions to education of engineering students for 25 years in US and overseas. He is also a well known and recognized researcher in robotics and their applications for space exploration at NASA and well as at CUA.

In the past several years he has also been very instrumental in closing the gap between nations through their bilateral engineering educational cooperation. Examples of these are US-Viet Nam, US-Singapore, US- Hong Kong, etc. In doing so he has not only made great contributions to engineering education, but more importantly he has used engineering education as an effective tool for world peace and collaborations.

In summary, I very strongly recommend Prof. Nguyen for the ICEE Award of the International Network for Engineering Education and Research. He has demonstrated his leadership in engineering education on a global scale with extraordinary dedication, enthusiasm and determination. He deserves this honor in recognition of his achievements in all aspects of education, research, mentorship.

Sincerely yours,

Mo Jamshidi, Ph.D., DEng. Dr. H.C., F-IEEE, F-ASME, F-AAAS, F-TWAS, F-NYAS, F-HAE
Lutcher Brown Endowed Chair
ECE Department and Director, ACE Center
University of Texas
San Antonio, TX, USA
Advisor to NASA Headquarters, Washington, DC, USA (1997-2003)
Senior Research Advisor, US Air Force Research Laboratory, KAFB, NM, USA (2002-2005)
Advisor, US Department of Energy HQ, Renewable Energy and Energy Efficiency Office (2003-2004)

6900 North Loop 1604 West • San Antonio, Texas 78249 • (210) 458-4491 • (210) 458-5947 fax

University of Maryland University College
Office of the President

July 3, 2007

iNEER Leadership Award Committee

Dear Members of the Award Committee,

The purpose of the letter is to nominate Dr. Charles C. Nguyen, Professor and Dean of the School of Engineering, The Catholic University of America, for the Leadership Award at the ICEE-2007 Conference that will be held in Portugal in September, 2007. The extraordinary efforts of Dr. Nguyen are compatible with the purpose and vision of iNEER. Dr. Nguyen has been a champion for teaching and learning through international cooperation and forging international partnerships to benefit students and faculty.

In 2004, President George Bush appointed Dr. Nguyen to the Board of Directors for The Vietnam Education Foundation. Not only has he met with over 25 universities throughout Vietnam, he has executed Memoranda of Understanding with International University, Vietnam National University in Ho Chi Minh City. This agreement facilitates a formal collaboration between CUA's School of Engineering and MCMIU for academic research and programs.

Dr. Nguyen has a global perspective that he brings to the university, the departments, curriculum and students. He is a strong advocate of international academic engineering partnerships, research, and student exchange programs. He has launched partnerships for semester—abroad programs and 2+2 academic programs with foreign universities in Hong Kong and Singapore. The partnership that Dr. Nguyen has launched encouraged faculty collaboration on research, joint authorship of academic papers and sabbatical leave.

Dr. Nguyen's visionary leadership has contributed to preparing engineering students to become global – minded and internationally experienced. His work in Vietnam may lead to potential World Bank financed centers of excellence, providing a lasting impact on engineering students in Vietnam, Asia and globally.

3501 University Boulevard East, Adelphi, MD 20783-8000 USA
301-985-7077 • Fax 301-985-7678 • www.umuc.edu

I cannot recommend a more experienced visionary and global academic leader in the field of engineering for this prestigious honor. Please contact me if you need any additional information.

Sincerely,

Susan C. Aldridge

Susan C. Aldridge, Ph.D.
President

Include Curriculum Vitae of Nominee Here

CHARLES C. NGUYEN, D.Sc.

Dean and Professor
School of Engineering
The Catholic University of America
Washington, DC 20064
nguyen@cua.edu, http://engineering.cua.edu/dean
Phone: (202)319-5160, Fax: (202)319-4499

EDUCATION

- 1982, DOCTOR OF SCIENCE (D.Sc.), in Electrical Engineering, completed with superior performance (GPA 4.00/4.00), George Washington University, Washington, D.C., Area of Concentration: System Science, Networks and Controls, Doctoral Dissertation Title: "Estimation and Stabilization of Linear Time-Varying Control Systems via Canonical Transformation".
- 1980, MASTER OF SCIENCE (M.S.), in Electrical Engineering, completed with superior performance (GPA 4.00/4.00), George Washington University, Washington, D.C., Area of Concentration: System Science, Networks and Controls.
- 1978, DIPLOM-INGENIEUR (Dipl. Ing.), in Electrical Engineering, named *"Best Graduate of the Class of 1978,"* Konstanz University, West Germany. Area of Concentration: Power Electronics and Energy Conversion, Engineer Thesis Title: "Determination of Crystal Temperature of Power Thyristors," work performed at Siemens Corporation Power Electronic Laboratory, Erlangen, Germany.

ACADEMIC AND INDUSTRIAL POSITIONS

ACADEMIC POSITIONS

- June 2001- present, Dean, School of Engineering, The Catholic University of America (CUA), Washington, D.C.
- 1997-2001, Chairman, Department of Electrical Engineering and Computer Science, CUA
- 1992-present, Professor of Electrical Engineering and Computer Science, CUA
- 1987-1992, Associate Professor of Electrical Engineering, CUA
- 1982-1987, Assistant Professor of Electrical Engineering, CUA
- 5/82-9/82, Assistant Professorial Lecturer, Department of Electrical Engineering, and Computer Science, The George Washington University, Washington, D.C.
- 1984-1987, Director, Center for AI and Robotics, School of Engineering and Architecture, CUA
- 1983-1984, Deputy Director, Center for AI and Robotics, School of Engineering and Architecture, CUA
- 1987-present, Director, Robotics and Control Laboratory, School of Engineering, CUA

INDUSTRIAL POSITIONS

- 1986-present, Consultant in the area of control systems, automation and robotics
- 9/77-2/78, Liebherr Company, Kempten, Germany, Designer in the Engineering and Design Department, tested and designed control circuits for working machines
- 1/77-9/77, Siemens Corporation, Erlangen, Germany, Engineer in the Power Electronics Laboratory, designed electric power amplifiers and static converters
- 1/73-7/73, Rheinfelden Power Company, Germany, Electrical installations and constructions in the generating plant of the water turbine power network

GOVERNMENT AND BOARD POSITIONS

- 5/04-4/07, *Presidential Appointment*, appointed by President George Bush to serve on the Board of Directors, The Vietnam Education Foundation (VEF)
- 5/04-present, *Member*, Division Friends Society, Asian Division of the U.S. Library of Congress
- 5/04-present, *Member*, Board of Directors, Asian Division of the U.S. Library of Congress
- 5/04-present, *Member*, Board of Directors, Library and Education Assistance for Vietnam (LEAF-VN), director on the LEAF Board of Directors.
- 2001-present, *Member*, Advisory Board, Vietnamese Association for Computing, Engineering Technologies and Science (VACETS)
- 2005-present, *Member*, Advisory Board, Vietnamese Culture and Science Association

RESEARCH ACTIVITIES

RESEARCH FELLOWSHIPS

- 1985, NASA/ASEE Summer Faculty Fellow, studied the software and hardware requirements for the implementation of an active compliant robot manipulator at NASA/Goddard Space Flight Center
- 1986, NASA/ASEE Summer Faculty Fellow, studied the hybrid control scheme for robot manipulators at NASA/Goddard Space Flight Center
- 1990-1991, National Academy of Science, Senior Research Associate, performed research on autonomous robotic assembly in space at NASA/Goddard Space Flight Center
- 1994, NASA/ASEE Summer Faculty Fellow, developed a control scheme for a balloon borne platform at NASA/Goddard Space Flight Center
- 1995, NASA/ASEE Summer Faculty Fellow, conducted computer simulation and analysis of a developed control scheme for a balloon borne platform at NASA/Goddard Space Flight Center

FUNDED RESEARCH PROJECTS

Principal Investigator (PI) and Co-PI of numerous funded research projects totaling about 1.5 million dollars. Some representative projects are listed below:

1. Decentralized Stabilization of Linear Time-Varying Large Scale Systems, Principal Investigator, Research Initiation Award, Engineering Foundation, $17,000.00, 1985-1986.
2. Distributed Active Control of Large Flexible Space Structures, Co-Principal Investigator with Dr. Amr Baz, Research Grant, Grant Number NAG 5-749, NASA/Goddard Space Flight Center, $40,902.00, March 1986-April 1987.
3. Robust Design of Distributed Controllers for Large Flexible Space Structures, Principal Investigator, Research Grant, Grant Number NAG 5-949, NASA/Goddard Space Flight Center, $22,391.00, June 1987-June 1988.
4. Design of Advanced Control Schemes for Telerobot Manipulators, Principal Investigator, Research Grant, Grant Number NAG 5-1124, NASA/Goddard Space Flight Center, $40,000.00, March 1989-March 1990.
5. A Study of Space-Rated Connectors Using a Robot End-Effector, Principal Investigator, Research Grant, Grant Number NAG 5-1415/1, NASA/Goddard Space Flight Center, $80,000.00, March 1989-September 1993.
6. Implementation of a Stewart Platform-Based Force Reflecting Hand Controller for Teleoperation, Principal Investigator, Research Contract, MC-1365-CUA, Jet Propulsion Laboratory through a subcontract with Meridian Corporation, $45,000.00, December 1990-May 1991.
7. Implementation of a Stewart Platform-based Munition Loader, Principal Investigator, Consulting Research Contract, Contract Number MC-1321-CCN, U.S. Air Force through a subcontract with Meridian Corporation, $53,000.00, December 1990-May 1991.
8. Active Control of Robot Manipulators, Principal Investigator, Research Grant, Grant Number NAG 5-780, NASA/Goddard Space Flight Center, $510,000.00, 1986-1996.
9. Attitude Control of Spacecrafts Using Electrochromic Devices, Principal Investigator, Research Grant, Grant Number NAG 5-780/14, NASA/Goddard Space Flight Center, $150,044.50, June 10, 1997-June 30, 1998.
10. FIRST Robotic Competition, Principal Investigator with Eleanor Roosevelt High School, NASA/Goddard Space Flight Center, $10,000, April 1998-July 1998.
11. Tactile Imaging for Diagnosis and Documentation in Breast Examinations, Co-Principal Investigator with Joseph Wang, Research Grant, NIH via Genex Technologies, Inc. $124,530, March 1998-December 1998.
12. FIRST Robotic Competition, Principal Investigator with Eleanor Roosevelt High School, Grant Number NAG 5-8357, NASA/Goddard Space Flight Center, $20,000, March 1999-September 1999.
13. Robot Control by Fluoroscopic Guidance for Minimally Invasive Spine Procedures, Georgetown University Medical Center, ISIS Center, $38,160, September 1, 2002-May 1, 2004.

PROFESSIONAL ACTIVITIES AND MEMBERSHIPS

EDITORSHIPS

- *Member*, Advisory Committee, the International Journal of Intelligent Computing in Medical Informatics and Image Processing, TSI Publisher, 2006-present
- *Associate Editor*, IEEE Systems Journal, Institute of Electrical and Electronics Engineers, IEEE Publisher, 2006-present

- *Founding Editor and Chair of the Editorial Advisory Board*, Intelligent Automation And Soft Computing (AutoSoft): An International Journal, AutoSoft Publisher, 2002-present
- *Editor-in-Chief*, Intelligent Automation And Soft Computing: An International Journal, AutoSoft Publisher, 1995-2002
- *Founder*, Intelligent Automation And Soft Computing (AutoSoft): An International Journal, AutoSoft Publisher, 1995
- *Member of the Editorial Advisory Board*, Journal of Intelligent and Fuzzy Systems, John Wiley and Sons Publisher, 1996-2001
- *Member of the Editorial Board*, Engineering Design and Automation, Wiley Publisher, 1995-1998
- *Associate Editor*, Computers and Electrical Engineering: An International Journal, Pergamon Press, 1993-2005
- *Guest Editor*, Computers and Electrical Engineering: An International Journal, Special Issue on Robotics Research at the NASA/Goddard Space Flight Center, 1991
- *Guest Editor*, Journal of Robotic Systems, Special Issue on Parallel Closed-Kinematic Chain Manipulators and Devices, 1993
- *Guest Editor*, Journal of Robotic Systems, Special Issue on Parallel Manipulators: Research, Development and Application, 1995
- *Guest Editor*, Journal of Intelligent and Robotic Systems, Special Issue on Kinematically Redundant Manipulators, 1997
- *Guest Editor*, Journal of Robotic Systems, Special Issue on Recent Progress on the Theoretical Developments for Mobile Robots, 1997
- *Guest Editor*, Journal of Robotic Systems, Special Issue on Recent Practical Developments for Mobile Robots, 1997
- *Guest Editor*, Journal of Robotic Systems, Special Issue on Latest Developments in Neuro-Fuzzy Intelligent Robotic Systems, 1997
- *Guest Editor*, Journal of Computer-Aided Surgery, Special Issue on Medical Robotics, 2002

MEMBERSHIPS

- Institute of Electrical and Electronics Engineers (IEEE), *Senior Member*
- *Founding member and Financial Director*, Washington Academy of Biomedical Medical Engineering (WABME)
- Society of Manufacturing Engineers (SME), *Senior Member*
- Robotics International, (SME/RI*), Senior Member*
- American Society for Engineering Education (ASEE), *Member*
- Dean's Council, American Society of Engineering Education (ASEE), *Member*
- American Association for the Advancement of Science, *Member*
- Sigma Xi Scientific Research Society, *Member*
- Tau Beta Pi Honor Society*, Member and Chief Faculty Advisor*
- International Society for Mini and Microcomputers (ISMM), *Member*
- American Biographical Institute, *Member of the Research Board of Advisors*
- International Biographical Centre*, Member of the Advisory Council*
- Vietnamese Association for Computing, Engineering Technologies and Science (VACETS), *Member and Advisory Board Member*

ACTIVITIES

- IEEE Control System Society, Washington D.C. Chapter, *Vice President* 1985, *Treasurer* 1984
- *Member* of the International Organizing Committee for the Second International Symposium on Robotics and Manufacturing Research, Education and Applications, Albuquerque, New Mexico, November 1988
- *Member* of the International Program Committee and Paper Reviewer for the ISMM International Conference on Computer Applications in Design, Simulation and Analysis, Reno, Nevada, February 1989
- *Chairperson*, Technical Session: Dynamics and Control of Robot Manipulators at the Second International Symposium on Robotics and Manufacturing Research, Education and Applications, Albuquerque, New Mexico, November 1988
- *Chairperson*, Technical Session: Robot Manipulators: Control and Languages at the Second International Symposium on Robotics and Manufacturing Research, Education and Applications, Albuquerque, New Mexico, November 1988
- *Chairperson*, Technical Session: Robot Grasping at the Third IEEE International Symposium on Intelligent Control, Arlington, Virginia, August, 1988
- *Chairperson*, Technical session, Robotics I at the ISMM International Conference on Computer Applications in Design, Simulation and Analysis, Reno, Nevada, February 1989
- *Chairman*, Technical session, Robotics I at the 2nd International CIRP Conference on New Manufacturing Technology, Cookeville, Tennessee, June, 1989
- *Member* of the International Organizing Committee for the Third International Symposium on Robotics and Manufacturing Research, Education and Applications, Vancouver, Canada, July 1989
- *Paper Reviewer* for the 1990 IEEE International Conference on Robotics and Automation, Ohio, May 1990
- *Paper Reviewer* for Computers and Electrical Engineering: An International Journal, Journal of Robotic Systems, International Journal of Robotics and Automation, Journal of Robotic Systems.
- *Proposal Reviewer* for National Science Foundation, 1989-
- *Chairperson and Organizer*, Technical Session: Dynamics and Control of Robot Manipulators at the Third International Symposium on Robotics and Manufacturing Research, Education and Applications, Vancouver, Canada, July 1990
- *Co-Chairperson and Organizer*, Technical Session: Research in Telerobotics at NASA/Goddard Space Flight Center at the Third International Symposium on Robotics and Manufacturing Research, Education and Applications, Vancouver, Canada, July 1990
- *Chairman*, Technical Session: Legged Locomotion at the 1991 IEEE International Conference on Robotics and Automation, Sacramento, California, April 1991
- *Co-Chair*, International Organizing Committee/Robotics for the Fourth International Symposium on Robotics and Manufacturing Research, Education and Applications, Santa Fe, New Mexico, November 1992

- *Organizer and Presenter*, three day seminar on Control, Kinematics and Dynamics of Parallel Robots at NASA/Johnson Space Center for Mitre Corporation, Houston, Texas, October 30, 1991
- *Speaker*, Invited Talk on Application of Robotics to the NASA Space Program, at the meeting of the Washington Chapter of the IEEE/Industry Applications Society, January 1992
- *Chairperson and Organizer*, Technical Session: Parallel Manipulators: Kinematics, Dynamics and Control at the Fourth International Symposium on Robotics and Manufacturing, Santa Fe, New Mexico, November 1992
- *Organizer*, Technical Sessions 1 and 2: Robotic Applications in Space: Docking, Berthing, Sensors and Control, at the Fourth International Symposium on Robotics and Manufacturing, Santa Fe, New Mexico, November 1992
- *Organizer and Panel Member*, Panel Session: Technology Transfer Between Government, Universities and Industries, at the Fourth International Symposium on Robotics and Manufacturing, Santa Fe, New Mexico, November 1992
- *Chair*, International Organizing Committee/Robotics for the Fifth International Symposium on Robotics and Manufacturing, Maui, Hawaii, 1994
- *Member*, International Advisory Committee, Conference on Electronics Technology Directions to the Year 2000 (ETD 2000), Adelaide, Australia, May 1995
- *Member*, International Scientific Committee, International Symposium on Soft Computing (SOCO'95), Rochester, New York, October 1995
- *Member*, International Scientific Committee, International Symposium on Intelligent Industrial Automation (IIA'96), Reading, England, March 1996
- *Member*, International Scientific Committee, International Symposium on Soft Computing (SOCO'96), Reading, England, March 1996
- *Member*, International Scientific Committee, International Symposium on Intelligent Automation (IA'96), Reading, England, March 1996
- *Member*, International Scientific Committee, Second International Symposium on Fuzzy Logic and Applications (ISFL'97), Zurich, Switzerland, February 1997
- *Member*, Organizing Committee, Sixth International Symposium on Robotics and Manufacturing, (ISRAM'96), Montpellier, France, May 1996
- *Member*, International Advisory Committee, First International Conference on Engineering Design and Automation, Bangkok, Thailand, March 1997
- *Program Vice Chair*, 1997 IEEE International Conference on Robotics and Automation (ICRA'97), Albuquerque, New Mexico, April 1997
- *Group Leader*, Robot Control Group, 1997 IEEE International Conference on Robotics and Automation (ICRA'97), Albuquerque, New Mexico, April 1997
- *Member*, International Program Committee, IASTED International Conference on Robotics and Manufacturing, Cancun, Mexico, May 1997
- *Program Committee Member*, The Fourth International Workshop on Rough Sets, Fuzzy Sets and Machine Discovery (RSFD'96), The University of Tokyo, Hongo, Tokyo, Japan, November 1996
- *Member*, International Steering Committee, World Manufacturing Congress (WMC'97), Massey University, Albany Campus, Auckland, New Zealand, November 24-27, 1997

- *Member*, International Organizing Committee, Second International Symposium on Intelligent Automation and Control (ISIAC'98), Anchorage, Alaska, 1998
- *Program Committee Member*, 1999 IEEE International Conference on Robotics and Automation (ICRA'99), Detroit, Michigan, May 1999
- *Chairman*, Technical Session: Robotic Sensing and Its Applications at the 1999 IEEE International Conference on Robotics and Automation (ICRA'99), Detroit, Michigan, May 1999
- *Chairman*, Technical Session: Force Control at the 1999 IEEE International Conference on Robotics and Automation (ICRA'99), Detroit, Michigan, May 1999
- *Co-Chairman*, Eighth International Symposium on Robotics with Applications (ISORA), World Automation Congress, Maui, Hawaii, 2000
- *Member*, International Scientific Committee, 3rd IMACS International Multiconference on: "Circuits, Systems, Communications and Computers" (CSCC'99), technical cosponsored by IEEE (Electron Devices Society), Athens (Greece), July 4-8, 1999
- *Member*, International Program Committee, First International Symposium on Robotics and Automation, ISRA'98, Saltillo, Coahuila, Mexico, on December 8-9, 1998
- *Member*, International Scientific Committee, Third International ICSC Symposium on Intelligent Industrial Automation (IIA'99) in Genova, Italy June 1-4, 1999

- *Member*, International Technical Committee, Second International Symposium on Engineering of Intelligent Systems (EIS'2000) June 29 - July 2, 2000, University of Paisley, Scotland, U.K.
- *Member*, International Program Committee, Second International Symposium on Robotics and Automation (ISRA'2000), by Mexican Academy of Robotics (ANIROB), Monterrey, Mexico, November 10-12, 2000
- *Member*, International Scientific Program Committee, Symposium on Intelligent Systems for Industry (ISFI), Paisley, Scotland, U.K., June 26 - 29, 2001
- *Member*, International Steering Committee, 3rd World Manufacturing Congress (WMC 2001), New York, September 24 - 27, 2001
- *Advisory Board Member* for 2002 VACETS Conference, George Mason University, Fairfax, Virginia, July 2002
- *Participant*, ABET Commission Summit 2005 at 2005 ABET Annual Meeting, San Diego, California, October 26, 2005
- *Participant*, 2006 ASEE Engineering Dean's Council/Public Policy Colloquium, National Academy of Science, Washington DC, February 2006.
- Traveled to Vietnam as a presidential appointee (Vietnam Education Foundation) in a delegation consisting of officials of National Academy of Science, the World Bank, the Millennium Strategic Initiative (MSI) Group, US university presidents and deans and visited 16 universities and research centers in Saigon and Hanoi, Vietnam to explore potential sites for Centers of Excellence to be funded by the World Bank, February 2005.
- Traveled to Vietnam and signed a collaboration agreement with Saigon Technology University (STU) for engineering education and research exchange, July 2005
- Traveled to Taiwan and visited five Catholic and Christian Taiwanese Universities and signed collaboration agreements with Fu Jen Catholic University, Saint John University and Chung Yuan Christian University, February 2006.

KEYNOTE, INVITED, PLENARY SESSION AND GUEST SPEAKERS

- *Keynote Speaker* on Medical Robotics, 2002 VACETS Conference, George Mason University, Fairfax, Virginia, July 2002
- *Lifetime Achievement Award Invited Presentation* on Current State and Future Trend of Medical Robotics, Sixth Biannual World Automation Congress, WAC 2004, Seville, Spain, June 2004
- *Keynote Speaker*, Tet (Vietnamese New Year) Celebration at Vietnamese Community in Manhattan Kansas, organized by The Vietnam Student Association at Kansas State University, February 2005
- *Speaker at Plenary Session*, on "An Asian American Way to the Top in Academia", 2005 VACETS Conference, Milpitas, San Joe, Virginia, July 2005
- *Guest Speaker* at the Vietnamese American Youth Excellence Recognition Program, sponsored by the Vietnamese Culture and Science Association (VCSA), Dallas, Texas, July 2005
- *Keynote Speaker* at VCSA Ninth Annual Youth Excellence Recognition Program sponsored by the Vietnamese Culture and Science Association (VCSA), Houston, Texas, August 2005
- *Invited Speaker* on Impact of Education on the Future of the Vietnamese American Community, 2005 National Convention for Physicians, Dentists and Pharmacists, Vietnamese American Medical Association (VAMA), Washington DC, September 2005
- *Panelist* of Moving Up the Career Ladder Workshop at the National Youth Leadership Development Camp Len Duong 2006, Triangle, Virginia, May 2006
- *Keynote Speaker* at Writing on America and Teen Writing Award Dinner, Viet Bao, Westminster , California, August 2006

AWARDS AND DISTINCTIONS

- Recipient of the *Certificate of Special Congressional Recognition* from Viet Bao and congresswoman Loretta Sanchez for "outstanding achievements, wonderful service and exemplary contribution to the community of California", Westminster, California, August 27, 2006
- Recipient of the *Member Resolution No. 2580* from the California Legislature Assembly for dedication and contributions in the area of education to the people of the State of California, Westminster, California, August 2006
- Recipient of the *Tenth Anniversary Award* from the International Journal of Intelligent Automation and Soft Computing (AutoSoft), for contribution as founder, past editor-in-chief, founding editor and advisory board chair of AutoSoft, WAC 2006, Budapest, Hungary, July 2006
- Recipient of the *Lifetime Time Achievement Award* from World Automation Congress for contribution to the fields of intelligent automation and robotics applications, WAC 2004, Seville, Spain, June 2004
- *Presidential Appointment*, Appointed by President George Bush to serve on the Board of Directors, The Vietnam Education Foundation, May 2004
- Recipient of the *Community Service Award for Contribution in Education* from Asia Entertainment, Kodak Theater, Hollywood, July 2004

- Recipient of the *Distinguished Alumni Scholar Award* from the George Washington University, 2002
- Recipient of the *Academic Vice President's Research Excellence Award* from the Academic Vice President (Provost), Catholic University of America, 1989
- Named *Best Graduate of the Class of 1978* by the President of Konstanz University, West Germany for best academic contributions and best grade point average (3.92/4.00), chosen from 256 graduates of 7 engineering departments
- Recipient of the NASA/ASEE Fellowship Awards, 1985, 1986, 1994, 1995
- Recipient of the National Academy of Science Senior Research Associateship, 1990-1991
- Recipient of the Research Initiation Grant awarded by Engineering Foundation, 1985
- Nominated by a former student to be listed in Who's Who among American Teacher for excellent teaching performance, 1996
- Biography and achievements listed in:
    1. Who's Who in the East
    2. Who's Who Among Asian Americans
    3. Who's Who in Finance and Industry
    4. Who's Who of Emerging Leaders in America
    5. Who's Who in Society
    6. Who's Who in the World
    7. Who's Who in the South and Southwest
    8. Men of Achievements
    9. Dictionary of International Biography
    10. International Directory of Distinguished Leadership
    11. Community Leaders of America
    12. International Leaders in Achievements
    13. Personalities of the Americas
    14. 5000 Personalities of the World
    15. Personalities of the South
    16. The Directory of Distinguished Americans
    17. The International Who's Who of Intellectuals
    18. International Book of Honor
    19. Men and Women of Distinction
    20. Who's Who in American Education
    21. Who's Who Among Young American Professionals
    22. Two Thousand Notable American Men
    23. American Men and Women of Science
    24. Who's Who in Science and Engineering
    25. Who's Who in Engineering
    26. Five Hundred Leaders of Influence
    27. Ve Vang Dan Toc
    28. Who's Who Among American Teachers
    29. Who's Who in America
    30. Strathmore's Who's Who

ACADEMIC SERVICES AT CATHOLIC UNIVERSITY OF AMERICA

SERVICE TO THE CUA SCHOOL OF ENGINEERING

- Chairman, Committee For Graduate Financial Aid, School of Engineering and Architecture, 1984-1989
- Member, Committee For Graduate Financial Aid, School of Engineering and Architecture, 1989-1991
- Member, Computer Facilities Committee, School of Engineering and Architecture, 1984-1986
- Chair, Committee on Appointments and Promotions (CAP), School of Engineering, 1992-1995
- Member, Doctoral Dissertation Topic Approval Committee, School of Engineering, 1991-1995
- Member, Laboratory Development Committee, School of Engineering, term starts September 1992 and ends May 1993
- Member, Ad-Hoc Committee for Studying Administrative Structure of Engineering Programs (SASEP), School of Engineering, 1992-1993
- Member, Ad Hoc Committee on Undergraduate Awards, School of Engineering, Spring 1994.
- Member, Executive Committee, School of Engineering, May 1994-1996
- Organized and supervised robotic laboratory sessions for Student Participating in Summer Program, Engineering 2000, Summer 1993-Summer 1999
- Chair, Ad Hoc Core Curriculum Committee, School of Engineering, September 1996-1998
- Member, Executive Committee, School of Engineering, 1997-2001

SERVICE TO THE CATHOLIC UNIVERSITY OF AMERICA

- Member, Minority Student Advising Committee, 1983-1984
- Member, Strategic Planning Committee, CUA Alumni Association, 2002
- Member, Subcommittee for the University Self Study/Balance between Graduate and Graduate Studies for the Middle State Accreditation Visit, 1987-1990
- Senator, University Academic Senate, 1994-1999
- Advisor, Tau Beta Pi Engineering Honor Society, 1985, 1986
- Chief Advisor, Tau Beta Pi Engineering Honor Society, 1986-present
- Advisor, Vietnamese Student Association, 1985-1995
- Member, Engineering Dean Search Committee, 1995-1996
- Member, Steering Committee of the Middle States Association Accreditation, 1998-2000.
- Member, Subcommittee for the University Self Study/Information Resources, Middle States Association Accreditation, 1998.

SELECTED PUBLICATIONS

JOUNAL PUBLICATIONS

1. Nguyen, C. and Lee, T.N., "Design of State Estimator for a Class of Time-Varying Multivariable Systems," IEEE Trans, Automatic Control, AC-30, No. 2, pp. 179-182, 1985.
2. Nguyen, C.C., "Canonical Transformation for a Class of Time-Varying Multivariable Systems," Int. Journal of Control, Vol. 43, No. 4. pp. 1061-1074, 1986.
3. Nguyen, C.C., "Arbitrary Eigenvalue Assignments for Linear Time-Varying Multivariable Control Systems," Int. Journal of Control, Vol. 45, No. 3, pp. 1051-1057, 1987.
4. Nguyen, C.C., "Design of Reduced-Order State Estimators for Linear Time-Varying Multivariable Systems,"Int. Journal of Control, Vol. 46, No. 6, pp. 2113-2126, 1987.
5. Nguyen, C.C., Pooran, F.J., and Premack, T., "Control of Robot Manipulator Compliance," in Recent Trends in Robotics: Modeling, Control and Education, Volume 1, edited by M. Jamshidi, J.Y.S. Luh, and M. Shahinpoor, North Holland, New York, pp. 237-242, 1986.
6. Nguyen, C.C. and Pooran, F.J., "Kinematics and Dynamics of a Six-Degree-of-Freedom Robot Manipulator with Closed-Kinematic Chain Mechanism," in Robotics and Manufacturing: Recent Trends in Research, Education, and Application, Volume 2, ASME Press, New York, pp. 351-359, 1988.
7. Nguyen, C.C., Pooran, F.J., "Adaptive Force/Position Control of Robot Manipulators with Closed-Kinematic Chain Mechanism," in Robotics and Manufacturing: Recent Trends in Research, Education, and Application, Volume 2, ASME Press, New York, pp. 177-186, 1988.
8. Nguyen, C.C., and Pooran, F.J., "Kinematic Analysis and Workspace Determination of A 6 DOF CKCM Robot End-Effector," Journal of Mechanical Working Technology, Vol. 20, pp. 283-294, 1989.
9. Nguyen, C.C., Pooran, F.J., "Dynamical Analysis of 6 DOF CKCM Robot End Effector for Dual-Arm Telerobot Systems," International Journal of Robotics and Autonomous Systems, Vol. 5, pp. 377-394, 1989.
10. Nguyen, C.C., and Pooran, F.J., "Learning-Based Control of a Closed Kinematic Chain Robot End-Effector Performing Repetitive Tasks," International Journal of Microcomputer Applications, Vol. 9, No. 1, pp. 9-15, 1990.
11. Nguyen, C.C., Zhou, Z.L., Mosier, G.E., "A Computationally Efficient Error-Based Adaptive Control Scheme for Kinematically Redundant Manipulators," in Robotics and Manufacturing: Recent Trends in Research, Education, and Applications, Volume 3, ASME Press, New York, pp. 473-480, 1990.
12. Nguyen, C.C., Zhou, Z.L., Mosier, G.E., "Compliant Control of a Redundant Telerobot Manipulator via a Position/Force Control Scheme," in Robotics and Manufacturing: Recent Trends in Research, Education, and Applications, Volume 3, ASME Press, New York, pp. 505-512, 1990.
13. Nguyen, C.C., "Implementation of Actuators for the Independent Modal Space Control Scheme," Computers and Electrical Engineering: An International Journal, Vol. 17, Number 2, pp. 75-90, 1991.
14. Nguyen, C.C., Zhou, Zhen-Lei and Mosier, G.E., "Analysis and Control of a Kinematically Redundant Manipulator," Computers and Electrical Engineering: An International Journal, Vol. 17, Number 3, pp. 147-162, 1991.

15. Nguyen, C.C., Antrazi, S., Zhou, Zhen-Lei and Campbell, C.E., "Analysis and Implementation of a 6 DOF Stewart-Platform-Based Robotic Wrist," Computers and Electrical Engineering: An International Journal, Vol. 17, Number 3, pp. 191-204, 1991.
16. Ollendorf, S., and Nguyen, C.C., "GSFC Robotics Research for Space Applications," Computers and Electrical Engineering: An International Journal, Vol. 17, Number 3, pp. 121-132, 1991.
17. Nguyen, C.C., Zhou, Z.L., Mosier, G.E., "Cartesian-Space Control of Redundant Manipulators using a Computationally Efficient Adaptive Control Scheme," Robotics and Computer-Integrated Manufacturing: An International Journal, Volume 9, No. 2, pp. 159-168, April 1992.
18. Nguyen, C.C., Antrazi, S.S., Park, J-Y., and Z-L. Zhou, "Trajectory Planning and Control of A Stewart Platform-Based End-Effector with Passive Compliance for Part Assembly," Journal of Intelligent and Robotic Systems, Volume 6, pp. 263-281, 1992.
19. Nguyen, C.C., Antrazi, S.S., Z-L. Zhou, and Campbell, Jr. C.E., "Analysis and Experimentation of a Stewart Platform-Based Force/Torque Sensor," International Journal of Robotics and Automation, Volume 7, No. 2, pp. 133-140, 1992.
20. Sparmo, J.R., Nguyen, C.C., Kia, O., Zhou, Z.L., "Force Control of Robot Manipulators Using On-Line Scheduling and Path-Dependent Linearization," Journal of Systems Science, Volume 18, No. 3, pp. 67-77, 1992.
21. Nguyen, C.C., Antrazi, S.C., Campbell, Jr., C.E., "Virtual Force Control of a Six-Degree-Of-Freedom Parallel Manipulator," in Robotics and Manufacturing: Recent Trends in Research, Education, and Applications, Volume 4, ASME Press, New York, pp. 357-363, 1992.
22. Nguyen, C.C., Antrazi, S.S., Park, J-Y, Sciannella, Jr., A., Campbell, Jr. C.E. and Vranish, J.M., "Autonomous Berthing of a Work Attachment Mechanism/Work Attachment Fixture," in Robotics and Manufacturing: Recent Trends in Research, Education, and Applications, Volume 4, ASME Press, New York, pp. 447-452, 1992.
23. Bryfogle, M.D., Nguyen, C.C., Antrazi, S., Chiou, P.C., "A Stewart Platform-based Force Reflecting Hand Controller," in Robotics and Manufacturing: Recent Trends in Research, Education, and Applications, Volume 4, ASME Press, New York, pp. 391-397, 1992.
24. Nguyen, C.C. and Jamshidi, M., Parallel Closed-Kinematic Chain Manipulators and Devices, Guest Editorial, Journal of Robotic Systems, Volume 10, Number 5, pp. 1-2, July 1993.
25. Nguyen, C.C, Antrazi, S.S, Zhou, Z-L., and Campbell, Jr., C.E., "Adaptive Control of a Stewart Platform Manipulator," Journal of Robotic Systems, Volume 10, Number 5, pp. 657-688, July 1993. P26. Bryfogle, M.D., Nguyen, C.C., Antrazi, S., Chiou, P.C., "Kinematics and Control of a Fully Parallel Force-Reflecting Hand Controller for Manipulator Teleoperation," Journal of Robotic Systems, Volume 10, Number 5, pp. 745-766, July 1993.
26. Nguyen, C.C., Zhou, Z-L, and Mosier, G.E., "Joint-Space Lyapunov-Based Direct Adaptive Control of a Kinematically Redundant Telerobot Manipulator," International Journal of Control and Computers, Volume 21 Number 1, pp. 23-27, 1993.
27. Nguyen, C.C., Zhou, Z-L., Bryfogle, M.D., "Robotic Munition Loader Based on Parallel Mechanism," in Robotics and Manufacturing: Recent Trends in Research, Education, and Applications, Volume 5, ASME Press, New York, pp. 221-227, 1994.

28. Nguyen, C.C., Zhou, Zhen-Lei and Bryfogle, M.D., "A Robotically Assisted Munition Loading System," Journal of Robotic Systems, Volume 12, Number 12, pp. 871-882, December 1995.
29. Nguyen, C.C., "Recent Developments of Parallel Manipulators," Guest Editorial, Journal of Robotic Systems, Volume 12, Number 12, pp. 781-782, December 1995.
30. Zhou, Z-L. and Nguyen, C.C., "Globally Optimal Trajectory Planning for Redundant Manipulators using State Space Augmentation Method," Journal of Intelligent and Robotic Systems, pp.105-117, Vol. 19, Number 1, May 1997.
31. Zhou, Z-L. and Nguyen, C.C., "On the Optimal Trajectory Planning for Kinematically Redundant Manipulators," pp.154-165, VACETS Technical Journal, Number 2, 1997
32. Rujirutana, S., Xuan, J., Freedman, M., Nguyen, C.C. and Wang, Y., "Non-Rigid Image Registration by Neural Computation, Journal of VLSI Signal Processing, pp. 237-246, 2004.
33. Cleary, K. and C.C. Nguyen, "Medical Robotics Review," Journal of Computer Aided Surgery, 2002.
34. Cleary, K. and C.C. Nguyen, "Medical Robotics," book chapter, Chapter 32, Biomedical Technology and Devices Handbook, CRC Press, LLC, July 2003.

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1. Nguyen, C. and Lee, T.N., "State Estimation of Linear Time-Varying Multivariable Systems," Proc., Circuits, Systems and Computers, 17th Asilomar Conference, pp. 40-44, 1983.
2. Nguyen, C., "Design of the State Feedback Controller for Linear Time-Varying Large-Scale Control Systems," Proc., Midwest Symposium on Circuits and Systems, West Virginia, pp. 750-753, 1984.
3. Nguyen, C., and Lee, T.N., "Pole Allocation for Decentralized-Control Systems," Proc., Int. Conf. on Modeling and Simulation, ASME, Williamsburg, pp. 14-24, Sept. 1986.
4. Lee, T.N., and Nguyen, C., "Stabilization of a Large-Scale System with Delay Interconnections," Proc., Int. Conf. Modeling and Simulation, AMSE, Williamsburg, pp. 38-47, Sept. 1986.
5. Lee, T.N., Nguyen, C.C., and Radovic, U., "Decentralized Stabilization of a New Class of Linear Continuous Large Scale Systems with Delay," Proc., Midwest Symposium on Circuits and Systems, Syracuse, August 1987.
6. Nguyen, C.C., Pooran, F.J., and Premack, T., "Modified Hybrid Control of Robot Manipulators for High Precision Assembly Operations," Proc., ISMM International Conference on Computer Applications in Design, Simulation and Analysis, Honolulu, Hawaii, pp. 191-195 Feb. 1988.
7. Nguyen, C.C., Pooran, F.J., and Premack, T., "Trajectory Control of Robot Manipulators with Closed-Kinematic Chain Mechanism," Proc., 20th Southeastern Symposium on System Theory, North Carolina, pp. 454-458, March 1988.
8. Nguyen, C.C., and Fang, X., "Optimal control of Large Space Structures via Generalized Inverse Matrix," Proc., 20th Southeastern Symposium on System Theory, North Carolina, pp. 652-656, March 1988.
9. Nguyen, C.C., Pooran, F.J., and Premack, T., "Learning-Based Hybrid Control of Closed-Kinematic Chain Robotic End-Effectors," Proc., Third IEEE International Symposium on Intelligent Control, Virginia, pp. 545-550, August 1988.

10. Nguyen, C.C., Pooran, F.J., "Joint-Space Adaptive Control of Robot End-Effectors Performing Slow and Precise Motions," Proc., 21th Southeastern Symposium on System Theory, Florida, pp. 547-552, March 1989.
11. Nguyen, C.C., Pooran, F.J., "Learning-Based Trajectory Control of Robot End-Effectors For Repetitive Assembly Tasks," Proc. ISMM International Conference on Computer Applications in Design, Simulation, and Analysis, Reno, Nevada, pp. 253-257, February 1989.
12. Nguyen, C.C., Mosier, G.E. "Model Reference Adaptive Control of a Telerobot System," Proc. ISMM International Conference on Computer Applications in Design, Simulation, and Analysis, Reno, Nevada, pp. 282-285, February 1989.
13. Sparmo, J.R., Zhou, Z.L., Walsh, T.M., Nguyen, C.C., "Cartesian-Space Control of Robot Manipulators using Path-Dependent Linearization," Proc. ISMM International Conference on Computer Applications in Design, Simulation, and Analysis, Reno, Nevada, pp. 270-273, February 1989.
14. Nguyen, C.C., Zhou, Z.L., Mosier, G.E., "Lyapunov-Based Direct Adaptive Control of Kinematically Redundant Telerobot Manipulators," Proc. IASTED International Symposium on Adaptive and Knowledge-Based Control and Signal Processing, Honolulu, Hawaii, pp. 14-18, August 1989.
15. Nguyen, C.C., Zhou, Z.L., Mosier, G.E., "Joint-Space Adaptive Control of a redundant Telerobot Manipulator," Proc. 4th IEEE International Symposium on Intelligent Controls, Albany, New York, pp. 59-65, September 1989.
16. Sparmo, J.R., Nguyen, C.C., Zhou, Z.L., "Trajectory Control of Robot Manipulators using On-Line Scheduling and Path-Dependent Linearization," Proc. IASTED International Symposium on Adaptive and Knowledge-Based Control and Signal Processing, Honolulu, Hawaii, pp. 33-37, August 1989.
17. Nguyen, C.C., Zhou, Z.L., Mosier, G.E., "Kinematic Analysis and Control of a 7 DOF Redundant Telerobot Manipulator," Proc. 23rd Southeastern Symposium on System Theory, Cookeville, Tennessee, pp. 71-77, March 1990.
18. Sparmo, J.R., Nguyen, C.C., Kia, O., Zhou, Z.L., "Force Control of Robot Manipulators Using On-Line Scheduling and Path-Dependent Linearization," Proc. 7th Int. Conf. on System Engineering, Las Vegas, Nevada, pp. 466-472, July 1990
19. Nguyen, C.C., Antrazi, S., Zhou, Z-L., "Trajectory Planning and Kinematic Control of a Stewart Platform-Based Manipulator," Proc., the 5th International Conference on CAD/CAM Robotics & Factories of the Future, pp. 493-499, Norfolk, Virginia, December 1990.
20. Smith III, W.F., Nguyen, C.C., "Mechanical Analysis and Design of a Six Degree of Freedom Robotic Wrist for Space Assembly," Proc., 23rd Southeastern Symposium on System Theory, South Carolina, pp. 177-181 March 1991.
21. Nguyen, C.C., Antrazi, S., Zhou, Z-L., "Analysis and Implementation of a 6 DOF Stewart Platform-Based Force Sensor for Passive Compliant Robotic Assembly," Proc., IEEE Southeastcon '91, Williamsburg, Virginia, pp. 880-884, April 1991.
22. Smith III, W.F., Nguyen, C.C., "On the Mechanical Design of a Stewart Platform Based Robotic End-Effector," Proc., IEEE Southeastcon '91, Williamsburg, Virginia, pp. 875-879, April 1991.

23. Nguyen, C.C., Zhou, Z-L., Antrazi, S.S., Campbell, Jr., C.E., "Efficient Computation of Forward Kinematics and Jacobian Matrix of a Stewart Platform-Based Manipulator," Proc., IEEE Southeastcon '91, Williamsburg, Virginia, pp. 869-874, April 1991.
24. Nguyen, C.C., Zhou, Z-L., Antrazi, S.S., Campbell, Jr., C.E., "Experimental Study of Motion Control and Trajectory Planning for a Stewart Platform Robot Manipulator," Proc., IEEE International Conference on Robotics and Automation, pp. 1873-1878, Sacramento, California, April 1991.
25. Matthews, M.G. and Nguyen, C.C., "A New Approach to Control of Time-Varying Robotic Systems," Proceedings of the ISCA International Conference on Computers and their Application, Long Beach, Ca, March 1994.
26. Nguyen, C.C. and Antrazi, S.S., "Intelligent Control of Robotic Systems," Proceedings of the Viet-Tech International Conference (VTIC'96), pp. III-26-III-32, Fairfax, Virginia, July 1996.
27. Zhou, Z-L. and Nguyen, C.C., "Joint Configuration Conservation and Joint Limit Avoidance of Redundant Manipulators," Proceedings of 1997 IEEE International Conference on Robotics and Automation, pp. 2421-2426, Albuquerque, New Mexico, April 1997.
28. Bryfogle, M.D., Nguyen, C.C., Zhou, Z-L. and S.S. Antrazi, "A Methodology for Geometric Design of Closed Kinematic Chain Mechanism," Proceedings of the 1997 IEEE International Conference on Robotics and Automation pp. 2974-2979, Albuquerque, New Mexico, April 1997.
29. Wang, Y., Nguyen, C.C., Srikanchana, R., Geng, Z., and Freedman, M, "Tactile Mapping of Palpable Abnormalities for Breast Cancer Diagnosis," Proceedings of the 1999 IEEE International Conference on Robotics and Automation (ICRA'99), Detroit, Michigan, May 1999.
30. ElNashar, G. and Nguyen, C.C.,"Design of Fuzzy Neural Systems Based on Frequency Response Specifications," Proceedings, World Automation Congress, WAC 2000, Maui, Hawaii, June 2000.
31. ElNashar, G. and Nguyen, C.C., "Tuning of Fuzzy Controller Using Scaling Factors," Proceedings, World Automation Congress, WAC 2000, Maui, Hawaii, June 2000.
32. Srikanchana, R., Woods, K., Xuan, J., Nguyen, C.C. and Wang, Y., "Non-Rigid Image Registration by Neural Computations", Proceedings of the 2000 IEEE International Conference on Neural Networks (NNSP 2001), pp. 413-422, Falmouth, Massachusetts, September 2001.
33. Srikanchana, R., Nguyen, C.C. and Wang, Y., "Tactile Mapping Of Palpable For Breast Cancer Diagnosis", Proceedings of the Fourth Viet-Tech International Conference (VTIC'02), Fairfax, Virginia, May 2002.
34. Srikanchana, R., Wang, Y., Nguyen, C.C. and Freedman, MT., "Tactile Imaging of Palpable Breast Cancer", Proceedings of SPIE Conference on Medical Imaging, San Diego, February 2002.
35. Srikanchana, R., Nguyen, C.C., and Wang, Y., "Tactile Mapping for Breast Cancer Diagnosis", Proceedings of the World Automation Congress, WAC-2002, Orlando, Florida, June 2002.
36. Corral, G., Ibanez, L., Nguyen, C.C., Stoianovici, D., Navab, N. and Cleary, K., “Robot Control by Fluoroscopic Guidance for Minimally Invasive Spine Procedures,”

Proceedings of CARS 2004, Computer Assisted Radiology and Surgery, Chicago, June 2004.

37. Nguyen, C.C., "Current State and Future Trend of Medical Robotics," Proceedings of the Sixth Biannual World Automation Congress, WAC 2004, Seville, Spain, June 2004.
38. Nguyen, C.C. et al, "Medical Robotics and Fluroscopy Servoing: Automating Needle Placement for Spine Procedures," Proceedings of the Sixth Biannual World Automation Congress, WAC 2004, Seville, Spain, June 2004.
39. Nguyen, C.C. and Cleary, K., "An Intelligent Approach to Robotic Respiratory Motion Compensation for Radiosurgery and other Interventions," Proceedings of the Seventh Biannual World Automation Congress, WAC 2006, Budapest, Hungary, July 2006.
40. Nguyen, C.C., "A Handbook-based Approach to Accreditation," Proceedings of the Best Assessment Processes VIII Symposium, Rose Hulman Institute of Technology, Terre Haute, Indiana, February 2006.

BOOKS

1. Jamshidi, M., Nguyen, C.C., Lumia, R. and Yuh, J., Robotics and Manufacturing: Recent Trends in Research, Education and Applications, Volume 5, ASME Press Series, ASME Press, 1994.
2. Jamshidi, M., Nguyen, C.C., Lumia, R. and Yuh, J., Intelligent Automation and Soft Computing: Trends in Research, Development and Applications, Volume 1, TSI Press Series, TSI Press, 1994.
3. Jamshidi, M., Yuh, J., Nguyen, C.C and Lumia, R., Intelligent Automation and Soft Computing: Trends in Research, Development and Applications, Volume 2, TSI Press Series, TSI Press, 1994.

SPECIAL ISSUES (Guest and Co-Guest Editor)

1. Nguyen, C.C. and Ollendorf, S., Robotics Research at the NASA/Goddard Space Flight Center, Special Issue, Computers and Electrical Engineering: An International Journal, Volume 17, Number 3, 1991.
2. Nguyen, C.C. and Jamshidi, M., Parallel Closed-Kinematic Chain Manipulators and Devices, Special Issue, Journal of Robotic Systems, Volume 10, No. 5, July 1993.
3. Nguyen, C.C., Parallel Manipulators: Research, Development and Application, Special Issue, Journal of Robotic Systems, Volume 12, Nr. 12, December 1995.
4. Nguyen, C.C. and Maciejewski, A.A., Kinematically Redundant Manipulators, Special Issue, Journal of Intelligent and Robotic Systems, Volume 19, Nr. 1, May 1997.
5. Nguyen, C.C. and Zheng, Y.F., Recent Progress on the Theoretical Developments for Mobile Robots, Special Issue, Journal of Robotic Systems, Volume 14, Nr. 2, February 1997.
6. Nguyen, C.C. and Zheng, Y.F., Recent Practical Developments for Mobile Robots, Special Issue, Journal of Robotic Systems, Volume 14, Nr. 4, April 1997.
7. Nguyen, C.C. and Song, Y.D., Latest Developments in Neuro-Fuzzy Intelligent Robotic Systems, Special Issue, Journal of Robotic Systems, Volume 14, No. 6, June 1997.
8. Cleary, K. and Nguyen, C.C., Medical Robotics, Special Issue, Journal of Computer Aided Surgery, 2002.

JOURNAL ISSUES (Editor-in-Chief)

International of Intelligent Automation and Soft Computing, Volume 1 (1995), Volume 2 (1996), Volume 3 (1997), Volume 4 (1998), Volume 5 (1999), Volume 6 (2000), Volume 7(2001), Volume 8 (2002).

International Network for
Engineering Education and Research

Budapest, July 3, 2007.

To Whom It May Concern

Letter of support for Charles C. Nguyen for his nomination for the iNEER Leadership Award.

I have known Dr. Nguyen for about 20 years. Through my contacts with Dr. Nguyen and his closest collaborators, I learned that he has a generous, wholesome personality and he is highly engaged in engineering education, especially in training engineers for the global market.

Since he became the dean of engineering at the Catholic University of America (CUA) in 2001 he has visited several foreign engineering institutions and met several university presidents, deans and engineering professors while promoting international networking for engineering education and research.

As a result of his work, starting next January, CUA students will be studying at Hong Kong Polytechnic University in Hong Kong, and students from that university will be studying at CUA. Furthermore, exchange program with Nanyang Technological University in Singapore will commence in the following year.

Dr. Nguyen is a board member of the Vietnam Education Foundation appointed by President George W. Bush and during his visits to Vietnam he has developed close relations with numerous universities and research organizations. In June 2005 he signed an agreement with the Vietnam National University (HCMIU) about collaboration with CUA in terms of academic programs and research activities.

He is recipient of numerous awards and honors including Engineering Foundation Research Initiation Award, the CUA Academic VP Research Excellence Award and the Lifetime Achievement Award from WAC.

He was program chair and vice-chair of several international conferences and he was member of organizing committees of numerous international major conferences.

Consequently, it is my great pleasure to highly recommend Dr. Nguyen for the iNEER Leadership Award. This prestigious honor would be a recognition of his positive impacts on international engineering education and research. In my opinion his professional experiences, his contributions to engineering and his undertakings confirm that he deserves to own this title.

Prof. Dr. Imre J. Rudas
Rector of Budapest Tech

MIDWEST UNIVERSITIES CONSORTIUM FOR INTERNATIONAL ACTIVITIES, INC.

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3 July 2007

Professor Frank H. P. Pao
Department of Civil Engineering
The Catholic University of America
620 Michigan Ave., N. E.
Washington, D. C. 20064

Dear Professor Pao:

I am pleased to support the nomination of Dr. Charles C. Nguyen, Professor and Dean of the School of Engineering, The Catholic University of America, for the 2007 Leadership Award of the International Network for Engineering Education and Research (iNEER). I am writing to support this nomination in my leadership role of the Midwest Universities Consortium for International Activities, Inc. (MUCIA). For more than 40 years, MUCIA, a coordinating organization, has represented a number of large U.S. research-intensive universities involved in providing educational and technical assistance to select universities, governments and private sector organizations in locations around the world.

During our acquaintance, Dr. Nguyen and I have had numerous opportunities to explore our mutual interests in the importance and benefits of promoting international education and linkages.

It is my perspective that the scope and depth of Charles Nguyen professional achievements as well as his visionary implementation of activities designed to expand and enhance academic and research institutional activities in multiple international locations make him an ideal candidate to receive the iNEER Leadership Award. Dr. Nguyen has established a distinguished record as a teacher, scholar and administrator of engineering programs as well as public diplomacy. His personal and professional understanding of the importance of strengthening linkages of educational institutions within a global context has been translated into the implementation of a range of educational activities and programs in engineering that benefit faculty, students, administrators, private and public organizations as well as the welfare of the larger society.

For the reasons referenced therein I enthusiastically endorse the nomination of Dr. Charles C. Nguyen for the Leadership Award iNEER.

Sincerely,

Philip R. Smith
President and Executive Director
MUCIA, Inc.
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The University of Texas at San Antonio College of Engineering Department of Electrical and Computer Engineering

TO WHOM IT MAY COCNERN

July 5, 2007

Re: ICEE Award Nomination of Professor **Charles C. Nguyen**

I am writing this letter in support of the nomination of Dr. Charles C. Nguyen, Professor of Electrical and Computer Engineering and Dean of School of Engineering at the Catholic University of America (CUA) for the Leadership Award at the ICEE-2007 conference to be held at University of Coimbra, Portugal in September 2007. I have known Professor Nguyen since 1986 as co-authors, co-organizers of international conferences, co-editors of journals and books, co-researchers, etc. I should indicate that I am often asked about expressing my opinion about the qualification of many peers around the world. I consider writing this letter as an important part of my professional activities.

Prof. Nguyen is internationally known for his many contributions to education of engineering students for 25 years in US and overseas. He is also a well known and recognized researcher in robotics and their applications for space exploration at NASA and well as at CUA.
In the past several years he has also been very instrumental in closing the gap between nations through their bilateral engineering educational cooperation. Examples of these are US-Viet Nam, US-Singapore, US- Hong Kong, etc. In doing so he has not only made great contributions to engineering education, but more importantly he has used engineering education as an effective tool for world peace and collaborations.

In summary, I very strongly recommend Prof. Nguyen for the ICEE Award of the International Network for Engineering Education and Research. He has demonstrated his leadership in engineering education on a global scale with extraordinary dedication, enthusiasm and determination. He deserves this honor in recognition of his achievements in all aspects of education, research, mentorship.

Sincerely yours,

Mo Jamshidi, Ph.D., DEng. Dr. H.C., F-IEEE, F-ASME, F-AAAS, F-TWAS, F-NYAS, F-HAE
Lutcher Brown Endowed Chair
ECE Department and Director, ACE Center
University of Texas
San Antonio, TX, USA
Advisor to NASA Headquarters, Washington, DC, USA (1997-2003)
Senior Research Advisor, US Air Force Research Laboratory, KAFB, NM, USA (2002-2005)
Advisor, US Department of Energy HQ, Renewable Energy and Energy Efficiency Office (2003-2004)

University of Maryland University College
Office of the President

July 3, 2007

iNEER Leadership Award Committee

Dear Members of the Award Committee,

The purpose of the letter is to nominate Dr. Charles C. Nguyen, Professor and Dean of the School of Engineering, The Catholic University of America, for the Leadership Award at the ICEE-2007 Conference that will be held in Portugal in September, 2007. The extraordinary efforts of Dr. Nguyen are compatible with the purpose and vision of iNEER. Dr. Nguyen has been a champion for teaching and learning through international cooperation and forging international partnerships to benefit students and faculty.

In 2004, President George Bush appointed Dr. Nguyen to the Board of Directors for The Vietnam Education Foundation. Not only has he met with over 25 universities throughout Vietnam, he has executed Memoranda of Understanding with International University, Vietnam National University in Ho Chi Minh City. This agreement facilitates a formal collaboration between CUA's School of Engineering and MCMIU for academic research and programs.

Dr. Nguyen has a global perspective that he brings to the university, the departments, curriculum and students. He is a strong advocate of international academic engineering partnerships, research, and student exchange programs. He has launched partnerships for semester—abroad programs and 2+2 academic programs with foreign universities in Hong Kong and Singapore. The partnership that Dr. Nguyen has launched encouraged faculty collaboration on research, joint authorship of academic papers and sabbatical leave.

Dr. Nguyen's visionary leadership has contributed to preparing engineering students to become global – minded and internationally experienced. His work in Vietnam may lead to potential World Bank financed centers of excellence, providing a lasting impact on engineering students in Vietnam, Asia and globally.

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I cannot recommend a more experienced visionary and global academic leader in the field of engineering for this prestigious honor. Please contact me if you need any additional information.

Sincerely,

Susan C. Aldridge

Susan C. Aldridge, Ph.D.
President