

Seyed H. Mousavinezhad, Ph. D.

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Western Michigan University
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EDUCATION

**MICHIGAN STATE UNIVERSITY – ECE Department, College of Engineering,
East Lansing, MI**

Ph.D. Electrical Engineering (Bioelectromagnetics)

MICHIGAN STATE UNIVERSITY – ECE Department, College of Engineering

M.S. Electrical Engineering

NATIONAL TAIWAN UNIVERSITY - College of Engineering, Taipei, Taiwan

B.S. Electrical Engineering

SPECIALIZATIONS:

Digital Signal Processing

Electromagnetics & Antennas

Biological Effects of EM Fields

Communication Systems

Circuits & Systems

Engineering Education and

Accreditation

EXPERIENCE

- 2004-present** Professor, Department of Electrical and Computer Engineering,
Western Michigan University, Kalamazoo, Michigan
- 1995-2004** Professor and Chair, Department of Electrical and Computer
Engineering, Western Michigan University
- 1990-94** Professor, Department of Electrical Engineering, Western
Michigan University
- 1982-90** Associate Professor, Department of Electrical Engineering,
Western Michigan University
- 1980-82** Assistant Professor, Electrical Engineering, Department of
Engineering, Purdue University Calumet, Hammond, Indiana
- 1979-80** Visiting Assistant Professor, Electrical Engineering Department,
Southern Illinois University at Carbondale, Carbondale, Illinois
- 1977-79** Assistant Professor, Electrical Engineering, School of Engineering,
Ferdowsi University, Mashhad, Iran
- 1973-77** Research/Teaching Assistant, College of Engineering, Michigan
State University, East Lansing, Michigan.

PROFESSIONAL AFFILIATIONS

Institute of Electrical and Electronics Engineers (IEEE), Senior Member

Winner of the Third Millennium Medal (2000)

Education Society Membership Development Chair

Region 4 Educational Activities Chair

General Chair, IEEE Electro/IT (eit) Conferences

West Michigan Section Chair

Also served as Newsletter Editor, Secretary, Treasurer, and Vice Chair of the West Michigan Section (2003-04)

American Society for Engineering Education (ASEE)

Newsletter Editor, NCS Executive Board member

Chair, ASEE ECE Division (2002/2003)

Organized ASEE North Central Section Spring Conference (2004)

Session chair for ASEE Annual Conferences held in:

Charlotte (1999)

St. Louis (2000)

Albuquerque (2001)

Portland (2005)

Montreal (2002)

Nashville (2003)

Salt Lake City (2004)

Also served as Vice Chair, Secretary of the North Central Section

American Association of University Professors (AAUP)

Phi, Kappa, Phi, Member

RESEARCH GRANTS

Co-PI, An UG Instructional Digital Signal Processing Laboratory, National Science Foundation, Award No. DUE-9952512, March 15, 2000 – February 28, 2003, Approximately \$100,000 (with matching).

Co-PI, Computer Science, Engineering and Mathematics Scholarship (CSEMS) Program, National Science Foundation, \$426,248, July 2000 – July 2004.

Texas Instruments Equipment Grants for DSP Lab.

NAFSA: Association of International Educators, \$5000; September 1998 – April 1999 and \$5000, August 1999-April 2000.

HONORS AND AWARDS

Michigan Economic Development Corporation, Governor's Innovation Forums, Innovations Roundtable, State of Michigan (1998-2003)

Outstanding Campus Representative, ASEE (1994)

ASEE Distinguished Service Award (“Significant and Sustained Leadership”), 2002

IEEE Third Millennium Medal

Sino-Iranian Cultural Exchange Fellowship/Scholarship Award (1967-72)

ADMINISTRATIVE EXPERIENCE

1995-2004: Professor and Chair, Electrical and Computer Engineering Department, Western Michigan University.

Summer 1990: Acting Chair, Electrical Engineering Department, Western Michigan University.

1987-94: Graduate Program Coordinator, Department of Electrical Engineering, Western Michigan University.

'84, '87, and '93: Led departmental efforts in the accreditation of Electrical Engineering and Computer Systems Engineering Programs by the Accreditation Board for Engineering and Technology (ABET). Fall 2005, Prepared ABET Self Study Reports (EE/CPE).

1983-95: Member of the WMU EE Department Executive Committee, serving as its Chair on several occasions. In addition, has served as Faculty Senator, EE Group Representative. Member of Search Committees for the selection of Faculty, Department Chair and Dean of the College of Engineering. Served in numerous departmental, college and university committees, ABET/ASEE coordinator for the Fall '93 ABET visit. Member of Research Policies Council (1994-97) and Graduate Studies Council (1997-2004) of the WMU Faculty Senate.

JOURNAL/BOOK REVIEWS

Reviewer for IEEE Transactions: Information Theory, Aerospace and Electronic Systems, Education, ASEE Annual Conferences. Book Reviews include:

“Signal Processing First,” McClellan, Schafer, Yoder, (Prentice Hall, 2003);
"Digital Signal Processing", Thomas J. Cavicchi, (John Wiley, 2000);
"An Introduction to Digital Communications", Jack Kurzweil, (John Wiley, 2000);
"DSP First, A Multimedia Approach", McClellan, Schafer, Yoder (Prentice-Hall, 1998);
"Electric Machinery & Transformers", Guru & Hizirolu, second edition (Oxford, 1995);
"Digital and Analog Communications", Gibson, second edition (Prentice-Hall, 1993);
"Introduction to Communication Systems", Stremler, third edition (Addison-Wesley, 1990).

PUBLICATIONS

- S. H. Mousavinezhad, "Electric and Magnetics Fields, Transmission Lines First?," ASEE Annual Conference, June 18-21, 2006, Chicago, Illinois.
- S. H. Mousavinezhad and John L. Mason, "ELECTROMAGNETICS: Transmission Lines First?," ASEE/NCS Spring Conference, Ohio Northern University, Ada, Ohio, April 7-8, 2005.
- I. M. Abdel-Qader, B. J. Bazuin, H. Mousavinezhad, and J.K. Patrick, "Real-Time Digital Signal Processing in the Undergraduate Curriculum," IEEE Transactions on Education, February, 2003.
- I. Abdel-Qader, B. Bazuin, and H. Mousavinezhad, "Teaching Real-Time Digital Signal Processing: Challenges and Opportunities," ASEE Annual Conference, Montreal, Quebec, June 16-19, 2002.
- D. Johnson, H. Mousavinezhad, and John Beuege, "Differential/Difference Equations Modeling and DSP, ASEE/NCS Conference, Oakland University, Rochester, Michigan, April 5-6, 2002.
- H. Mousavinezhad and I. Abdel-Qader, "Digital Signal Processing in Theory and Practice," Frontiers in Education Conference, Reno, Nevada, October 10-13, 2001.
- I. Abdel-Qader and H. Mousavinezhad, "DSP Laboratory Experiences at the Undergraduate Level," ASEE Annual Conference, Albuquerque, New Mexico, June 24-27, 2001.
- H. Mousavinezhad, I. Abdel-Qader, N. Kosaraju, and S. Jeyachandran, "Theory and Applications of Digital Signal Processing," ASEE/NCS Conference, Cleveland, Ohio, April 6-7, 2001.
- M. Atashbar, F. Severance, H. Mousavinezhad, "Simulation of a Surface Acoustic Wave Oxygen Sensor," First IEEE Electro/Information Technology Conference, Chicago, June 9, 2000.
- H. Mousavinezhad, V. Jagannathan, L. Tobos, "Digital Signal Processing: Theory & Practice", accepted for presentation at the ASEE/NCS Spring 2000 Conference, Michigan State University, E. Lansing, Michigan, March 31.
- H. Mousavinezhad, A. Anguelov, "Implementation of Digital Filters," ASEE 1999 Spring Conference, Penn State University, Erie, April 9, 1999.
- H. Mousavinezhad, D. Johnson, "Algorithms and Computer Methods in Digital Signal Processing," Computers in Education Journal, Vol. VIII, No. 2, April-June 1998.
- H. Mousavinezhad, "Computer Aided Design of Digital Filters," to be presented at 1998 ASEE Annual Conference, Seattle, Washington, July 1.
- H. Mousavinezhad and D. Johnson, "Algorithms and Computer Methods in Digital Signal Processing," 1997 ASEE Annual Conference, June 18, Milwaukee, Wisconsin.
- H. Mousavinezhad, "Computerized Tools in Digital Signal Processing," 1996 ASEE Annual Conference, June 24, Washington, D.C.
- H. Mousavinezhad, "Computerized Mathematical Tools in EE Courses, 1995 ASEE Annual Conference, Anaheim, California.
- H. Mousavinezhad and B. Guru, "Computer-Aided Analysis in Circuits and Systems," ASEE NCS 1994 Spring Conference, Grand Valley State University, Grand Rapids, Michigan, April 8, 1994.

- E. Ernst, H. Mousavinezhad and F. Splitt, "Technical Requirements of the Engineer in the Year 2000," 1993 Eastern Communications Forum, Washington, D.C., May 9, 1993.
- H. J. Sybesma and S. H. Mousavinezhad, "Root Extraction Algorithm," presented at the ASEE N. Central Section Meeting, Pittsburgh, PA, April 2, 1993.
- T. M. Srinivasan and S. H. Mousavinezhad, "Infrared Tomographic Reconstruction for Industrial and Biomedical Applications," ASEE North Central Section Conference, University of Dayton, April 10, 1992. Paper published in the conference Proceedings.
- S. H. Mousavinezhad, "Signals and Systems Course," ASEE North Central Section Conference, University of Dayton, April 10, 1992. Paper published in the conference Proceedings.
- S. H. Mousavinezhad, "Undergraduate Communications System Course," paper presented at the 1991 ASEE North Central Section Conference, Saginaw Valley State University, Saginaw, Michigan, April 5, 1991. Also published in the proceedings.
- N. M. Blachman and S. H. Mousavinezhad, "The Spectrum of the Square of a Synchronous Random Pulse Train," IEEE Transactions on Communications, January, 1990.
- S. H. Mousavinezhad and Sami A. Esmail, "Updating Hardware/Software in a Digital Signal Processing Laboratory," presented at the 1990 ASEE N. Central Section Meeting, University of Akron, Akron, Ohio, April 6, 1990. Also published in the conference proceedings.
- S. H. Mousavinezhad, "International Engineering Education -- An Example," presented at the ASEE 1990 Annual Conference, Toronto, Canada, June 26, 1990. Also published in the conference proceedings.
- S. H. Mousavinezhad, "Implantable Microwave Radiator in Finite Biological Body," 2nd International Symposium on Recent Advances in Microwave Technology, Beijing, China, September 4-8, 1989. (Paper accepted for presentation, but unable to attend.)
- S. H. Mousavinezhad and S. A. Esmail, "Development of a Digital Signal Processing Laboratory Workstation," presented at the 1989 ASEE North Central Spring Section Meeting at the LIT, Southfield, Michigan, September, 1988. (Published in the Proceedings.)
- S. H. Mousavinezhad, "Power Frequency Electromagnetic Field Interaction with Humans," presented at the 1988 IEEE International Conference on Systems, Man, and Cybernetics, Beijing/Shenyang, P. R. China, August 8-12, 1988. The paper was published in the Conference Proceedings.
- S. H. Mousavinezhad, "New Graduate Engineering Programs at WMU", ASEE Annual Conference, Portland, Oregon, June 20-24, 1988. The paper was published in the Conference Proceedings.
- S. H. Mousavinezhad, "Extremely Low Frequency Electromagnetic Fields Interaction with Biological Systems: A Faculty Research Fellowship", ASEE North Central Section Meeting, University of Toledo, Toledo, Ohio, April 9-11, 1987.
- N. M. Blachman and S. H. Mousavinezhad, "Trigonometric Approximations for Bessel Functions", IEEE Transactions on Aerospace and Electronic Systems, Vol. AES-22, No. 1, Jan. '86.
- S. H. Mousavinezhad, et al., "Multimicroprocessor-Based Robotic Vision System", Conference on Intelligent Systems and Machines, Oakland University, Rochester, Michigan, April 23-24, 1985.
- N. M. Blachman and S. H. Mousavinezhad, "Carrier-Tracking Loop Performance for Quaternary and Binary PSK Signals", IEEE Transactions on Aerospace and Electronic Systems, Vol. AES-19, #2, March, 1983.

S. H. Mousavinezhad, et al., "Response of Insulated Electric Field Probes in Finite Heterogeneous Biological Bodies", IEEE Transactions on Microwave Theory and Techniques, Vol. MTT-26, No. 8, August 1978.

K. M. Chen, S. H. Mousavinezhad, et al., "Induced EM Fields in Human Bodies and Heads", International Symposium on the Biological Effects of EM Waves, Airlie, Virginia, Oct. 30-Nov. 4, 1977.

S. H. Mousavinezhad, et al., "Response of Insulated Electric Field Probes in Models of Finite Heterogeneous Biological Bodies", International Symposium on the Biological Effects of EM Waves, Airlie, Virginia, Oct. 30 - Nov. 4, 1977.

S. H. Mousavinezhad, "Implantable Electromagnetic Field Probe in Finite Biological Bodies", Ph.D. Dissertation, Electrical Engineering Department, Michigan State University, June, 1977.

S. H. Mousavinezhad, K. M. Chen, and D. P. Nyquist, "Implantable EM Field Probes in Finite Biological Bodies", International IEEE/AP-S Symposium and USNC/URSI Meeting, Oct. 11-15, 1976.