

Parsiani, Hamed

Academic rank: Professor

Degrees with fields, institution, and date:

BS	Mathematics	Oregon State University	1970
BS	Electrical Engineering	Oregon State University	1971
MEE	Electrical Engineering	Texas A&M University	1973
Ph. D.	Electrical Engineering	Texas A&M University	1979

Faculty service at UPRM:

Date of original appointment: August 1986

Dates of advancement in rank:

Assistant Professor:	1986 to 1988
Associate Professor:	1988 to 1993
Professor:	1993 to present
Total years of service:	16

Areas of professional expertise:

Communications, Image Processing, Microprocessors

Other related experience—academic or industrial.

Image Compression and Coding Technical Program Chairman of SIP'2000, Las Vegas, Nov. 19-23, 2000.

1996 sabbatical leave working at the Image Compression Lab., Kodak Com., Rochester, N.Y.

Grant evaluator for: University of South California, which submitted research proposal to Hewlett-Packard, and Lockheed Martin Missile & Space, on the topic of High Quality Image and Video Processing and Encoding (1996).

Technical Program Chairman and Co-organizer: of the First Puerto Rico Symposium on Intelligent Systems in Communications and Power (SISCAP-94), Feb.21-23,94.

Technical paper referee for the:

- 36th Midwest Symposium on Circuits and Systems International Journal of Computers and Electrical Engineering
- Image Communications Journal

Consulting, patents

Consulting for VERNET Inc. of P.R., on Data & Video compression, 1999-2000

State(s) in which registered

None

Publications:

1. Leonid Tolstoy, Hamed Parsiani, "Application of Fourier Descriptors and Neural Network to Shape Recognition", CRC2002 Proceedings, Mayagüez, Puerto Rico, 2002.
2. Héctor Ortiz, Hamed Parsiani, "Simplified JPEG Compression of Radar Sub-Surface Images and the Application of Threshold Filtering." In Proceedings CRC 2002, Mayagüez, PR, 2002.

3. Elí García, Ruth Rieckehoff, Hamed Parsiani, "Restoration of a Degraded Image." In Proceedings CRC 2002, Mayagüez, PR, 2002.
4. Hamed Parsiani & Rolando Gonzalez, "Iterated Block Matching Fractals with Parent & Child," presented at Signal and Image Processing, SIP'2000, Nov. 19-23, 2000, Las Vegas, Nevada.
5. Jose del Toro Duran, Hamed Parsiani, "Analysis of Fractals and Wavelets leading to an improved image compression method", CRC'2000 Proceedings, May 6, 2000, Mayaguez, P.R.
6. Rolando Gonzalez, Hamed Parsiani, "Modular Approach to IBMF Compression Software", CRC'2000 Proceedings, May 6, 2000, Mayaguez, P.R.
7. Santos Lopez, Hamed Parsiani, "Non-linear Least Square method applied to Iterated Block Matching Fractals (IBMF) for image compression", CRC'2000 Proceedings, May 6, 2000, Mayaguez, P.R.
8. Norman Lopez, Hamed Parsiani, "Predictive Lossless Image Compression (PLIC) based on pixels Correlation coefficients and a tight region of support," to be published in URC-TC'2000, conference proceedings, April 8, 2000, Nashville TN.
9. Norman Lopez, Hamed Parsiani, "Predictive Lossless Image Compression (PLIC) Algorithm and its Coding Analysis," CRC'2000 Proceedings, May 6, 2000, Mayaguez, P.R.
10. Hamed Parsiani, Andres Fuentes, "Fast Near lossless Iterated Block Matching Fractals Image Compression", Signal and Image Processing , SIP'98, Oct. 28-31, 98, Las Vegas, Nevada.
11. Hamed Parsiani, Paul Roman, "Near lossless Iterated Block Matching Fractals Image Compression", Proceedings of URC-TC'98 Conference, Huntsville, Alabama, Feb. 22-25, 1998.
12. Hamed Parsiani, William Navas, "Advances in Weighted Finite Automata & Matching Pursuits in Image Compression", Proceedings of Midwest Symp. on Circuits and Systems, MWSCAS' Aug. 9-12, 98.
13. Hamed Parsiani, "Analysis of Iterated Function System Fractals for Image Compression", Proceedings of the 21st International Conference on Computers & Industrial Engineering (ICC&IE- 97), San Juan, P.R.
14. Hamed Parsiani, "Analysis of Iterated Block Matching Fractals for Image Compression", Proceedings of the 21st International Conference on Computers & Industrial Engineering (ICC&IE- 97), San Juan, P.R.
15. Hamed Parsiani, William Navas, "Recent Progress in Fractal Compression", Proceedings of First ADMI Conference on Computing at Minority Institutions, ADMI'97.
16. Hamed Parsiani, William Navas, "Weighted Finite Automata Fractal Compression", Proceedings of the 8th International Conference on Signal Processing Applications & Technology ICSPAT'97.
17. Hamed Parsiani, Ricardo Garcia, "State of the Art Iterated Block Matching Fractals in Image compression", Proceedings of Midwest Symposium on Circuits and Systems, MWSCAS'97.
18. Hamed Parsiani, Ricardo Garcia, "Iterated Block Matching Encoder/Decoder for Image Compression", Proceedings of Computing Research Conference, CRC'97.
19. Oscar Mislá, Hamed Parsiani, "Fuzzy Logic in Image Compression", Proceedings of 31

- ACS Junior Technical Meeting, 3/9/96.
20. Oscar Mislá, Hamed Parsiani, "Codebook Design Limitations of Fuzzy C-Means Algorithm", Proceedings of Computing Research Conference, CRC'96, April 19, 1996.
 21. Oscar Mislá, Hamed Parsiani, "Crisp and Fuzzy C-Means Algorithm Analysis", Proceedings of First ADMI Conference on Computing at Minority Institutions, ADMI'96, July 23-28, 1996.
 22. Hamed Parsiani, Oscar Mislá, "Fuzzy Class Learning Vector Quantizer in Image Compression", Proceedings of Midwest Symposium on Circuits and Systems, MWSCAS'96, Iowa State University, August 18-21, 1996.
 23. Hamed Parsiani, Oscar Mislá, "Computationally Efficient Fuzzy Class Learning Vector Quantizer in Image Compression", Proceedings of the 7th International Conference on Signal Processing Applications & Technology ICSPAT'96, Boston Massachusetts, USA, October 7-10, 1996.
 24. Hamed Parsiani, "Color Image and Video Compression Modules for Signal Processing Worksystem (SPW) System Simulation Software, 24th COPIMERA congress Proceedings, Oct. 3-8, 1993, in San Juan, P.R.
 25. Hamed Parsiani, "Isolated Noise Detection and Reduction in Color Images". Proceedings of "36th Midwest Symposium on Circuits and Systems" (Aug. 16-18, 1993), Detroit, Michigan.
 26. Hamed Parsiani, "Coding and Decoding of the Differential Motion Vector Using One Single VLC Table", Bell Communications Research, Technical, TM-ARH-019703, 11 pages, Aug. 7, 1991, Morristown, N.J.
 27. Hamed Parsiani, "Still Image Transmission Methods", Bell Communications Research, Technical, TM-TSY- 013427, 28 pages, Jan. 16, 1989, Red Bank N.J.
 28. H. Parsiani, "A mathematical technique for modeling multiplexed channel transmission error performance, and its applications to embedded channel error statistical parameters determination", Bell Communications Research Tech. , TM-TSY-011088, 23 pages, Jan 4, 1988, Red Bank, NJ.
 29. H. Parsiani and P.S. Noe, "Satellite Selection for Sequential Receivers", Proceedings Navigation Satellite Users Conference, Institute of Navigation, Dec. 1979.
 30. H. Parsiani, et al, " A Navigation Algorithm for Single Channel Low-Cost GPS Receiver", Texas A&M University, 1979.

Grants or externally funded project active during the last five years: (FY 1996-97-- 2001-02)

"Center of Remote Sensing & Technology", as a research collaborator, CREST-NOAA research grant for \$1,200,000, 2001-2004. This grant is part of collaborative effort with City University of N.Y. for a total of \$7,500,000.

"Tropical Center for Earth and Space Studies", as a Research collaborator, NASA-URC II, Goddard Flight Center, NASA grant for \$4,999,513.00, with UPR matching fund for \$2,450,000.00, 2000-2005.

PaSCoR-NASA grant, as a Research collaborator, NASA grant for \$3,163,167.00, with UPR matching fund for \$ 299,918.00, 1999-2004.

PI, "Performance Study of Several Commercial Motion Imaging Compression Solutions", Kodak company Rochester, N.Y. and UPRM-IAP, \$4985, Aug. 97 - April 98.

“Tropical Center for Earth and Space Studies”, as a Research collaborator, NASA-URC I, Goddard Flight Center, NASA grant for \$6,438,693, with UPR matching fund for \$1,904,861, 1995-2000.

"Enhancement of the Computer Engineering Academic and Research Program at UPRM" as a Research Collaborator, National Science Foundation, Washington, D.C. \$ 1.3 M, October 1989 thru. September 1994, and its renewal from 1994 thru 1999.

Scientific and professional societies of which a member:

Institute of Electrical and Electronics Engineers, (Member)

Honors and awards:

Permanent member of the Eta Kappa Nu Honor Society, granted by Texas A&M University.

Institutional and professional service in the last five years: (FY 1996-97 -- 2001-02)

Member of Graduate Committee, 1996-98

Professional development activities in the last five years: (FY 1996-97 -- 2001-02)

Attended a course on “Ground Penetrating Radar”, at GSSI, Salem New Hampshire, Dec. 4,5, 2001,

Attended a seminar on “Puerto Rico Space Grant”, at Hyatt Hotel, Dorado, Nov. 14-16, 2001. Presentation aided by poster sessions, on the Remote Sensing & Space Exploration research progress. I had submitted three posters on the status of my research with PaSCoR-NASA.

Attended a course on “Radar Signal Processing Theory & Application”, at Georgia Institute of Technology, Jan. 30 – Feb. 2, 2001.

Sabbatical leave, learning and conducting research work on Fractal Compressions at the Image Compression Lab., Kodak Com., Rochester, N.Y., 1996.

Community service activities: (FY 1996-97 -- 2001-02)

1988 delegate from Puerto Rico to elect the Universal House of Justice, the Supreme Institution of the Baha’is of the World. They are re-elected once every 5 years. The Baha’i Faith is an independent world religion with its international head quarters is located in Haifa, Israel.

Member and treasurer of the National Spiritual Assembly of the Baha’is of Puerto Rico, 1995-present.