

1. Name and Academic Rank

Abolfazl M. Amini, Professor

2. Degrees with fields, institution, and date

BS, Electrical Engineering, Southern University, May 1984

MS, Applied (Engineering) Physics (signal processing),
University of New Orleans, December 1986

Ph.D., Theoretical Chemical Physics, Tulane University, May 1993

3. Number of years of service on this faculty, including date of original appointment and dates of advancement in rank

31 years, August 1994,

August 1994 – August 1999, Assistant professor, full-time

August 1999 – August 2004, Associate Professor, full-time

August 2004 – present, Professor, full time

4. Other related experience—teaching, industrial, etc.

June 1993 – August 1994, full time

National Research Council Postdoctoral Fellow, NASA's Stennis Space Center

Summers 2004 and 2005, full time

NASA summer faculty, the Stennis Space Center.

Jan. 1985 – Dec. 1986, Research /Teaching Assistant University of New Orleans

December 1986 – August 1988, Research Associate University of New Orleans

August 1988 – May 1993, Research/Teaching Assistant, Tulane University

June 1995 – August 1995, United Nations Development Program Research Consultant.

5. Principal publications of the last five years

1. Simultaneous optimization by simulation of iterative deconvolution and noise removal for non-negative data, Abolfazl M. Amini, George E Ioup, Juliette W Ioup, Proceedings of the SPIE's International Symposium on Defense and Security, Program on Signal processing, sensor fusion, and target recognition XXII, Vol. 8745, (Baltimore, Maryland, 2013)
2. Simultaneous optimization by simulation of iterative deconvolution and noise removal to improve the resolution of impulsive inputs Abolfazl M. Amini, George E Ioup, Juliette W Ioup, Proceedings of the SPIE's International Symposium on Defense and Security, Program on Signal processing, sensor fusion, and target recognition XXII, Vol. 8745, (Baltimore, Maryland, 2013)
3. Review of Monte Carlo image enhancements, Abolfazl M. Amini, Proceedings of the SPIE's International Symposium on Defense + Security, Program on Visual information processing XX conference, 8056 (Orlando, Florida, 2011)
4. Sensor performance monitoring using Fourier and Wavelet Transforms, Abolfazl M. Amini, Proceedings of the SPIE's International Symposium on Defense and Security, Program on independent component analyses, wavelets, neural networks, Biosystems, and Nanoengineering VII conference, Vol. 7343, (Orlando, Florida, 2009).

6. Honors and awards

National Research Council's Postdoctoral Fellowship Award
United Nations Development Program Research Consultant Award.

7. Research Fundings:

1. "Advanced Numerical Simulation to Enhance Plume Diagnostic Technology," NASA, Stennis Space Center, Awarded, May 1996 - September 1996; **\$20,000.**
2. "Advanced Numerical Simulation to Enhance Plume Diagnostic Technology," NASA, Stennis Space Center, Award renewed, May 1997 - December 1997; **\$20,000.**
3. "Noise Removal, Deconvolution, and Vibrational relaxation Studies to Enhance Plume Diagnostic Technology," NASA, Awarded for three years (May 1998 to May 2001, extended to May 2002); **\$299,772.**
4. "Extraction of Qualitative Features from Sensor Data", NASA, Stennis Space Center, Awarded October 2002 - September 2003, **\$20,000.**
5. "Constrained iterative spectral deconvolution for the design of an interference-avoiding waveform" as part of a project funded by AFRL on interference-avoiding Transform-Domain communication systems and cognitive radios. Investigators are A. Amini (worked on the above topic only), E. Walker, J. Luo, R Smith from Southern University, and a team from Louisiana State University, **\$245,000** Southern University's share.