CURRICULUM VITA

March 19, 2017

NAME: Thiab R. Taha

ADDRESS: Department of Computer Science
University of Georgia
Athens, Georgia 30602-7404

EDUCATION:

Ph.D.	Clarkson University, Potsdam, NY	Applied Mathematics, & Computer Science	1982
M.Sc.	The University of Jordan, Amman, Jordan	Mathematics (Num. Analysis)	1977
B.Sc.	The University of Jordan, Amman, Jordan	Mathematics	1972

DISSERTATION:

"On the Numerical and Analytical Aspects of Certain Nonlinear Evolution Equations"

THESIS:

"Numerical Solutions of Reactant Concentration in Channels"

RESEARCH:

1. Computational Science and Parallel Computing
   i. Deriving numerical methods for solving problems in Science and Engineering such as:
      a) problems that model optical fiber communication systems;
      b) problems that model water waves and waves in plasma physics, etc.
   ii. Software development for solving evolution equations.
2. Bioinformatics: involved in a project called: “Computing Life” with scientists from Physics and Genetics. My role is to a) solve the system of differential equations that model biochemical reaction networks by using efficient numerical methods; b) develop parallel algorithms to speed up the computations; c) develop a web based Graphical User Interface for numerical simulations.
3. Big Data Analytics.

POSITIONS:

1982- Present	Head (2013-present) and Professor (promoted 1994); Associate Professor (promoted 1988); Assistant Professor (1982 - 1988); Department of Computer Science, University of Georgia.
1995-96	Visiting Professor on a Fulbright Scholar to Jordan, Department of Computer Science, University of Jordan.
1985-86	Visiting Professor, College of Science and Technology, Jerusalem (on leave from the University of Georgia)
1982	Research Associate, Clarkson University (summer)
1978-82	Teaching Assistant, Clarkson University
1976-78	Instructor, Teachers' Training Institute, Jordan
1976-77	Instructor, University of Jordan
1974-78	Chairman and Instructor, Teachers' Training Institute, Jordan (summers)
1972-76	Secondary Education Teacher, Jordan

Other positions:

Director of the “CUDA Teaching Center (teachingcuda.uga.edu), UGA, 2011-present.
Director of the “CUDA Research Center (cuda.uga.edu), UGA, 2014-present.
Director of the *Big Data Consulting Services and Training center (http://research.franklin.uga.edu/bigdata/) at the University of Georgia, 2013-presnt.*
Member of the Faculty of Engineering at UGA.
Adjunct Professor, Institute of Bioinformatics - 553 (July 1, 2014 - Present)

HONORS and AWARDS:

4 Member of the Jordanian National Study group for the Improvement of Curricula and the Teaching of Mathematics.
5 Scholarship from the Jordanian Government for B.A. studies in Science/Math.
6 The 1985 winner of the M. G. Michael Award for Research in the Sciences at the University of Georgia.
7 Listed in the International Who's Who of Professionals (1997), published by Gibralter Publishing, Inc., Vol. II, page 1-1288.
8 Listed in the 1998 edition of American Men and Women of Science, by R. R. Bowker Data Collection Center.
9 Member of the Middle East Advisory Panel on the Fulbright Senior Scholar Program for CIES (Council for International Exchange of Scholars), 1999 - present.
10 Keynote Speaker: "Parallel Numerical Investigation of Fiber Optics Communication Systems", The 2000 Arab Conference on Information Technology (ACIT'2000), Oct. 31 – Nov. 2, 2000, Zarka, Jordan.
11 Panel Session: "IT-The New Challenge to e or not to be", The 2000 Arab Conference on Information Technology (ACIT'2000), Oct. 31 – Nov. 2, 2000, Amman, Jordan.
12 Awarded the Zarka Private University Emblem, Jordan, November 2000.
13 Keynote Speaker: "A Parallel Algorithm for Numerical Simulation of WDM Optical Fiber Communication Systems", The 2003 Arab Conference on Information Technology (ACIT'03), December 20-23, 2003, Alexandria, Egypt.
14 IMACS (International Association for Mathematics and Computers in Simulation) Events Coordinator, December 2005 – present.
15 Keynote Speaker: The First International Conference on Mathematical Sciences, May 15-17, 2006, Gaza, Palestine.
16 Member of the Board of Directors of the International Association for Mathematics and Computers in Simulation (IMACS), August 2005 – present.
17 Invited lecture by the Italian INdAM, "Numerical Methods for Solving Nonlinear Evolution Equations", presented at the meeting on *Mathematical Models for Complex Systems*, September 26-29, 2007, The Palazzone, Cortona (AR), Italy.
18 Chair and Conference Coordinator of the "IMACS World Congress on Computational and Applied Mathematics & Applications in Science and Engineering", Athens, GA, August 3-7, 2009.
19 Chair and Workshop Coordinator of the "Workshop on Mathematical Biology and Numerical Analysis", August 1-2, 2009.
20 Vice President of International Association for Mathematics and Computers in Simulation (IMACS), August 2009 – present.
21 Program Chair and Conference Coordinator of the Seventh IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena:" Computation and Theory", Athens, GA, April 3-7, 2011.
22 "The third IMACS 2011 Most Successful Papers Award" for the paper titled "Solitary wave solutions for a generalized KdV-mKdV equation with variable coefficients", MATCOM 80 (2010) 1867-1873.
23 Nomination for the IMACS Honor Member 2011.
24 Director of the "CUDA TEACHING CENTER, UGA, 2011-present.
25 An a award from KING ABDULAZIZ UNIVERSITY (10,000 SAR = $3,000 USD) for the paper by Ismail, M. and Taha, T., "A Linearly Implicit Conservative Scheme for the Coupled Nonlinear Schrödinger Equations", Journal of Mathematics and Computers in Simulation, Vol. 74, issues 4-5 pp. 302-311, 2007 for its publication in a high impact factor Journal and number of citations.
26 The 2012 winner of the Outstanding Faculty Service Award from the Computer Science Department at the University of Georgia.
27 Member and Chair of the Georgia Advanced Computing Resource Center-Advisory Committee (GACRC-AC), UGA, 2011-2013.
28 Member of the Board of Directors of the University of Georgia Research Foundation (UGARF), 2011-2015.
29 Director of the "Big Data Consulting Services and Training center, UGA, 2013-present.
30 Director of the "CUDA RESEARCH CENTER, UGA, 2014-present.
31 Editor-in-Chief for the APNUM journal, February 2017- present.
32 A Keynote speaker at the 8th. International Conference on Information Technology, Al-Zaytoona University, Jordan, May 17-18, 2017
33 A founding member of "The Georgia Informatics Institute (GII) from 2016-present.

EXTERNAL GRANTS:

1. U.S. Army Research Office, "Interdisciplinary Study in Physical Mathematics", $241,112 Oct. 1, 1987 - Sept. 30, 1990. With M. Adams, R. L. Anderson, J. Dorfmeister, D. P. Landau, R. A. Kunze, M. H. Lee, and R. Varley. For administrative purposes the Principal Investigators are designated to be Anderson, Kunze and Lee. The proposal is an umbrella for six separate but related research topics. Taha authored one, "IST Numerical Schemes of Certain Nonlinear Partial Differential Equations", and co-authored (with Anderson) another, "Perturbation of IST Numerical Schemes and Their Applications".
2. National Science Foundation, "Hypercube Acquisition", $163,250 (W.B. McRae, P.I.) Feb. 15, 1988 - July 31, 1989. Contributed the proposal "Numerical schemes for equations solvable by IST and their perturbed forms applied to other physically interesting equations" which, with four other proposals, formed the research justification for this instrumentation grant.
3. NSF, “Computer and Information Science and Engineering (CISE) Research Instrumentation”, (R. W. Robinson, P.I.) $27,525 (with an equal matching fund from the University) 1989 - 1990. Contributed the proposal "Numerical schemes for equations solvable by IST and their perturbed forms applied to other physically interesting equations" which, with the other three proposals, formed the research justification for this instrumentation grant.
4. DOE, “Numerical Methods for Nonlinear Partial Differential Equations”, Thiab R. Taha (PI), $94,599, July 15, 1990 - July 14, 1993.
5. Intel Corp., “Algorithms for IST Numerical Schemes”, Thiab R. Taha (PI), $14,939, funds for maintaining UGA's hypercube parallel system; contributed one of seven projects in support of the technical justification of the proposal, February 1991 - February 1992.
6. NSF, “Mathematical Sciences Computing Research Environments”, (Thiab R. Taha, PI) $63,500 (with a matching fund of $63,500 from the University) July 1, 1992 - June 30, 1995. Contributed the proposal “Parallel Algorithms for IST Numerical Schemes”.
7. Intel Corporation, “Research Partner Grant in Computational Science” (Thiab R. Taha, PI) $192,905, 1993. Contributed the proposal “Parallel Algorithms for IST Numerical Schemes”.
8. Fulbright Scholar award in Jordan, 1995-96 academic year.
9. Fulbright Scholar award in Jordan (extension), June 26 - August 26, 1996.
10. "Acquisition of a Symmetric Multiprocessor Scientific Computer System", NSF, David Landau (P.I.), Hamid R. Arabnia, David Lowenthal, W. D. Potter, Thiab R. Taha, et al, $420,000 (with matching funds of $314,899 from OVPR and $157,200 from UCNS), September 15, 1997 - September 14, 1999.
11. NSF, “The Second IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory”, Thiab R. Taha (PI), $13,817, Sept. 1, 2000 – Jan. 31, 2002.
12. International Engineering Consortium under a Faculty/Student grant for participation in the IEC@SUPECOM, June 3-6, 2002, Atlanta, GA., $2,500.
13. NSF, “Support for the Third IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory Conference”, Thiab R. Taha, (PI) $15,000, August 1, 2002 - October 31, 2003.
14. NSF, “Support for the Fourth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory Conference”, Thiab R. Taha (PI), $15,000, August 1, 2004 - July 31, 2006.
15. NSF, “Support for the Fifth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory Conference”, Thiab R. Taha (PI), $18,000, August 15, 2006 – July 31, 2008.
16. NSF, “Genomics and Computational Biology: a REU site”, J. Arnold (PI), D. Logan, C. Teare-Ketter (Co-PIs), T. Taha, Senior Personnel, $210,00, March 1, 2007 – February 28, 2010.
17. NSF, “MRI-Acquisition of a Computer Cluster for Bioinformatics research at UGA”, Ying Xu (PI), Liming Cai, Jessica C. Kissinger, Russell L. Malmberg, Heinz-Bernd Schuttler, (CO-PI’s), Thiab Taha (Senior Personnel), $796,822 with $344K matching fund from OVPR, August 1, 2008 – July 31, 2011.
18. NSF, “Support for the Sixth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory Conference”, Thiab Taha (PI) and Jerry Bona (Co-PI), $25,000, April 1, 2009 – March 31, 2010.
19. NSF, “Workshop on Mathematical Biology and Numerical Analysis”, Thiab Taha (PI), J Arnold (Co-PI), J. Prestegard (Co-PI), A. Sornborger (Co-PI), and A. Summers (Co-PI), $30,000, September 1, 2009 – August 31, 2011.

20. NSF, REU site: genomics and computational biology, $318,012, 03/01/07 – 02/28/11, (Thiab R. Taha, senior personnel).
21. NSF, Workshop on Mathematical Biology and Numerical Analysis, $30,000, (Thiab Taha, PI), 09/01/09 – 08/31/11.
22. NSF, The Seventh IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Thiab Taha (PI) and Jerry Bona (Co-PI), $25,000, 02/01/2011 – 01/31/2014
23. NSF, REU site: Genomics and Computational Biology, $313,328, 03/01/11- 02/28/14, (Thiab Taha, Senior personnel).
24. NVIDIA Corporation, "CUDA TEACHING CENTER", Thiab R. Taha (PI), Nvidia provided 12 GPU cards, 18 text books and teaching and Training material, and $6,085 for a TA in 2011.
25. NVIDIA Corporation, "CUDA TEACHING CENTER", Thiab R. Taha (PI), Nvidia provided 20 more GPU cards($6,572) in November 2012.
26. NSF, The Eighth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Thiab Taha (PI) and Jerry Bona (Co-PI), $18,000, 01/15/2013 – 06/30/2015.
27. NSF, EAGER: Big Data Consulting Services and Training Center, Thiab R. Taha (PI), September 15, 2013 – August 31, 2015, $34,966.
28. NSF, REU site: genomics and computational biology, NSF Total Award Amount: $662,610 Total Award Period Covered: 02/02/14-02/01/19, Jonathan Arnold (PI), (Thiab Taha, Senior Personnel)

INTERNAL GRANTS:

29. Faculty Research Grants Proposal, approved for the amount of $3,112. February 15, 1984, titled "On Numerical and Analytical Aspects of Certain Non-linear Evolution Equations."
30. Research foundation of the University of Georgia, approved for the amount of $813 to present a paper at the International Symposium of Numerical Analysis held in Madrid, Spain, September 17-19, 1985.
31. Research Foundation of the University of Georgia, Foreign Travel Grant approved for the amount of $1,215 to organize and chair a session and present a paper at the 13th IMACS World Congress on Computation and Applied Mathematics, Dublin, Ireland, July 1991.
32. The University Computing and Networking Services of the UGA, "Parallel Algorithms for IST Numerical Schemes", 80 hours of cpu time on the RS/6000 cluster along with 64MB of disk storage, July 15, 1992 - July 14, 1993.
33. The University Computing and Networking Services of the UGA, RS/6000 Model 340 workstation. (with E. Rodney Canfield, Jay Arenson, Jon Higbie), 1992.
34. The University Computing and Networking Services of the UGA, Parallel Algorithms for Blow-up in a Generalized KdV equation, 2000 hours of wall clock on the SP2 along with 64MB of disk storage on the RS/6000 cluster, Oct. 3, 1994 - July 1, 1995.
35. Research Foundation of the University of Georgia, Foreign Travel Grant approved for the amount of $1,519 to organize and chair a session and present a paper at the 15th IMACS World Congress on Computation and Applied Mathematics, Berlin, Germany, Aug. 24-29, 1997.
27. Research Foundation of the University of Georgia, Foreign Travel Grant approved for the amount $2,155 to chair a session and present an Invited Talk at the Seventh International Colloquium on Numerical Analysis and Computer Science with Applications, Plovdiv, Bulgaria, Aug. 13-17, 1998, and to present an Invited Talk at the Ninth International Colloquium on Differential Equations, Plovdiv, Bulgaria, Aug. 18-23, 1998.
28. Proposal for Research Funding Support for Research Equipment, D. K. Lowenthal (PI), H. R. Arabnia, S. M. Bhandarkar, J. Kececioglu, and T. R. Taha (Co-PIs), Arts and Sciences Deans Office, $16,963, 1998.
29. Research Foundation of the University of Georgia, Foreign Travel grant approved for the amount $2,150, to organize and chair a session and present a paper at the 16th IMACS World Congress on Computation and Applied Mathematics, Lausanne, Switzerland, August 19-24, 2000.
30. UGA, President's Venture Fund, "Support for the ACM Southeast Conference" (with J. Miller and S. Smith), $1,000, November, 2001.
31. UGA, President Venture Fund, "Support for the Third IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, $2000, April 2003.
32. Research Foundation of the University of Georgia, Foreign Travel grant approved for the amount of $1,730 to give a Keynote speech and chair a session at the 2003 Arab Conference on Information Technology (ACIT'03), December 20-23, 2003, Alexandria, Egypt.
33. Research Foundation of The University of Georgia, "Support for the Fourth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, $3000, April 2005.
34. University of Georgia Provost's Office, International Travel grant for a partnership in Jordan, $1,000, 2004.

35. Research Foundation of the University of Georgia, Foreign Travel Grant approved for the amount of $1,335 to organize and chair a session and present two papers at the 17th IMACS World Congress on computation and Applied Mathematics, Paris, France, July 11-15, 2005.
36. Research Foundation of the University of Georgia, Foreign Travel Grant approved for the amount of $1,095.00 to present a paper at The International Arabic Conference on Information Technology ACIT'2005, Al Isra private University, Amman, Jordan, December 6-8, 2005.
37. Research Foundation of the University of Georgia, Foreign Travel Grant approved for the amount of $1,451.00 to present a paper at The First International Conference on Mathematical Sciences, Gaza, Palestine, May 15-17, 2006.
38. Contingency Fund from Engineering, UGA, $500 for the travel to give a Keynote lecture at the first International Conference on Mathematical Sciences in Gaza, May 15-17, 2006.
39. Research Foundation of the University of Georgia, "Support for the Fifth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", $3000, April 2007.
40. UGA, President Venture Fund, approved for the amount of $2,277 to present an invited paper at The International Arabic Conference on Information Technology ACIT'2008, University of Sfax, Tunisia, December 16-18, 2008.
41. UGA, Franklin College of Arts & Sciences, "Support for the Sixth IMACS International Conference on Nonlinear Evolution Equations and wave Phenomena: Computation and Theory", $2000, March 2009.
42. Research Foundation of the University of Georgia, "Support for the Sixth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", up to $8000, March 2009.
43. UGA, President Venture Fund, Support for the IMACS World Congress on Computational and Applied Mathematics & Applications in Science and Engineering, $4000, August, 2009.
44. Research Foundation of the University of Georgia, Foreign Travel Grant to present a paper at The International Arabic Conference on Information Technology ACIT'2009, $2,641, Sana'a, Yemen, December 15-18, 2009.
45. Research Foundation of UGA, Foreign Travel Grant approved for the amount of $2,001 to present a paper at The Arabic Conference on Information Technology (ACIT'2010), Benghazi, Libya, December 14-16, 2010.
46. Travel grant from the Provost office for Academic Affairs for the amount $2,500 to present an invited talk at the MASCOT 2010 Conference, Las Palmas de Gran Canaria, Spain, October 20-22, 2010.
47. Research Foundation of UGA, "Support for the Seventh IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", $1,500, April 2011.
48. UGA, Franklin College of Arts & Sciences, "Support for the Seventh IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", $1,500, April, 2011.
49. UGA, President Venture Fund, "Support for the Seventh IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", $2000, April 2011.
50. Travel grant from the Provost office for Academic Affairs for the amount $2,000 and $500 from the Franklin College of Arts and Sciences to present a Keynote talk at the MASCOT 2011, 11th Meeting on Applied Scientific Computing and Tools, Rome, Italy, October 19-21, 2011.
51. Research Foundation of the University of Georgia, Foreign Travel Grant to present a paper at The International Arabic Conference on Information Technology ACIT'2011, $2,272, Riyadh, Saudi Arabia, December 11-14, 2011.
52. Travel grant from the Provost office for Academic Affairs, Franklin College of Arts and Sciences, and the CS Department to present an invited talk at the The International Arabic Conference on Information Technology ACIT'2012, $2,618, Zarqa University, Amman, Jordan, December 10-14, 2012.
53. Travel grant from the Provost Office for Academic Affairs, Franklin College, FYOS, $3,922 to present a paper at the 19th IMACS Congress, Spain, and August 26, 2013 – August 30, 2013.
54. The Provost's 2014 Summer Research grants (summer 2014, fiscal year 2015), $5,000.
55. Travel grant from the Provost office for Academic Affairs, Franklin College of Arts and Sciences, and the CS Department to present an invited talk at the The International Arabic Conference on Information Technology ACIT'2014, $2,500, Nazwa, Oman, December 9-11, 2014.
56. Travel grant from the Provost office for Academic Affairs, Franklin College of Arts and Sciences, and the CS Department to present an invited talk at the IMACS Congress in Xiamen, China, December 2016.
57. Travel grant from the Provost office for Academic Affairs, Franklin College of Arts and Sciences, and the CS Department to present an invited talk at The International Arabic Conference on Information Technology ACIT'2016, $2,400, Amman, Jordan, December 14-17, 2015.
58. Travel support from the Provost office for Academic Affairs, Franklin College of Arts and Sciences, and the CS Department to present an invited talk at the IMACS Congress, Xiamen, China in December 10-14, 2016

INSTRUCTIONAL GRANTS:

1. Office of Instructional Development at UGA, "Interactive Numerical Computation", Thiab R. Taha (PI), $2035, April 1991.
2. Office of Instructional Development at UGA, "Extension of MATLAB License", Thiab R. Taha (PI), $250, April 1992.
3. Office of Instructional Development at UGA, "Color Graphical Display of Computational Results", Thiab R. Taha (PI), J. W. Smith (Co-PI), $2,575, May 1993.
4. Office of Instructional Development at UGA, "Upgrading my PC for Instructional Development", Thiab R. Taha (PI), $312.00, Sept. 1994.
5. Office of Instructional Development at UGA, "Dynamic Interactive Presentation Tool", Thiab R. Taha (PI), March 1995, $2500.00.
6. Learning Technology grant approved for the amount of, $30,000 from Center for Teaching and Learning, UGA, + $4,408 from Franklin College and CS Department at UGA, Thiab R. Taha (PI), T. Liu (Co-PI), Chris Plaue (Co-PI), FY 2011 and FY 2012.

GRANTS SUBMITTED:

1. NSF, Undergraduate Research Opportunities in Quantitative Biology at the University of Georgia, Andrew Sornborger (PI), Thiab Taha (Senior Personnel), $987,543, July 1, 2010 – June 30, 2015.
2. NSF, "Workshop on Computational Methods for Nonlinear Waves", Thiab Taha (PI), Gino Biondini(Co-PI) and Bernard Deconinck (Co-PI),$33,760, October 1, 2008 – September 30, 2009.
3. NSF, "II-NEW: Acquisition of a multicore system for research and training in simulation and power management", Thiab Taha (PI), S. Funk (Co-PI), M. Hybinette (Co-PI), K. Kochut (Co-PI), and J. Miller (Co-PI), $204,525, January 1, 2009 – December 31, 2011.
4. NIH, R25 Proposal "Summer School on Quantitative Methods for Biology", Liming Cai (PI), Thiab Taha (Senior Personnel), $985,682, December 1, 2009 – November 30, 2014.
5. NSF, "An Integrative Approach to Teaching Neuroimage Analysis", Tianming Liu (PI), Thiab Taha (Co-PI), $178,835, January 1, 2010 – June 30, 2013.
6. NSF, "Workshop on Mathematical Biology and Numerical Analysis II", Thiab Taha (PI), J. Arnold (Co-PI), J. Prestegard (Co-PI), A. Sornborger (Co-PI), and A. Summers (Co-PI), $38,888, April 1, 2010 – March 31, 2011.
7. Internal proposal submitted to OVPR, has been selected to be submitted to NSF as an MRI proposal from UGA, $1,399,461.48 that includes $419.838.44 matching fund from OVPR, (Thiab Taha, Co-PI), Dec. 2010.
8. NSF, MRI: Acquisition of a CPU/GPU high performance computing system for research and training at the interface of the Biological and Physical Sciences, $1,399,461.48 that includes $419.838.44 matching fund from OVPR, (Thiab Taha, Co-PI). 08/01/2011 – 07/31/2014.
9. NSF, Integrating Biomedical Image Analysis into Undergraduate Curricula, (Tianming Liu, PI), (Thiab Taha, Co-PI), 12/01/2010 – 11/30/2012, $197,992.
10. NSF MRI: Acquisition of a CPU/GPU high performance computing system for research and training at the interface of the Biological, Chemical, and Physical Sciences, Jonathan Arnold (PI), Thiab Taha(Co-PI), John Amster(Co-PI), Bernd Schuttler(Co-PI), Jim Leebens-Mack(Co-PI), $3,149,395 that includes $944,818 matching fund from OVPR and VPIT, 2014 – 2017.
11. NSF, MRI: Acquisition of a Regional Advanced, Computing Track 3 System(REACTS), A multi-institutional proposal led by Clemson University, Thaib-Taha(Senior Personal) contributed to two sections of the Project description, $3,988,244, 09/01/2015 – 08/31/2018.
12. NSF, QuBBD: Effective Statistical Sampling and High Performance Computing for Analyzing Big FMRI Data, Wenxuan Zhong(PI), Thiab Taha(co-pi), with Ping Ma, Tianmng Liu, Steffen Miller as Co-PIs. , $99,507, 05/01/16 to 04/30/2017
13. NSF, FEW: Balancing food, water, and energy budgets to enhance resiliency in a future of climatic uncertaint, Keshav (K.C.) Das(PI), Thiab Taha(Co-Pi), with Elizabeth Kramer, Craig E Landry, John Schramski as Co-PIs, $77,047, 07/01/2015 to 06/30/2016
14. NSF, Workshop on Computational Science and Data Analytics, Thiab R Taha (PI), with Jonathan Arnold, Natarajan Kannan, Caner Kazanci, Jessica C Kissinger as Co-PIs, $26,946 06/01/2015 to 05/31/2015
15. Workshop on Open Science in Big Data (OSBD) (FP00009570)
    NATIONAL SCIENCE FOUNDATION, *December 5, 2016–December 4, 2017*
    Amount: $ 0 (US), Role: Primary investigator of, Credit: 20%
    Application date: October 7, 2016, Funding type: Research
16. INFEWS/T1 Regional pathways to urban food system security and sustainability: A data driven

approach to building resiliency in the Metropolitan Atlanta Food Supply System (FP00007781)NATIONAL SCIENCE FOUNDATION, *October 1, 2016–September 30, 2019*
Amount: $ 2,995,842 (US), Role: Primary investigator of, Credit: 9%
Application date: April 20, 2016, Funding type: Research

17. Sustaining Diversified Specialty Crop Production in a Southeastern Multistate Region Under Water Stress (FP00005760)
USDA NIFA, *January 1, 2016–December 31, 2019*
Amount: $ 8,136,218 (US), Role: Primary investigator of, Credit: 10%
Application date: August 27, 2015, Funding type: Research

18. QuBDD (FP00005882)
NATIONAL SCIENCE FOUNDATION, *May 1, 2016–April 30, 2017*
Amount: $ 99,504 (US), Role: Primary investigator of, Credit: 16%
Application date: August 6, 2015, Funding type: Research

19. Sustaining diversified Crop production in a water-stressed Souteastern multi-state region through water reuse and informed particiation (FP00009005)
USDA NIFA, *January 2, 2017–January 1, 2022*
Amount: $ 4,984,401 (US), Role: Primary investigator of, Credit: 7%
Application date: August 4, 2016, Funding type: Research

PROFESSIONAL ACTIVITIES:

- Member of the SIAM Activity Group on Computational Sciences and Engineering.
- Member of the SIAM Activity Group on Nonlinear Waves and Coherent Structures (NWCS).
- Member of the Society for Industrial and Applied Mathematics (SIAM).
- Member of the SIAM SEAS.
- Member of the SIAM Activity Group on Supercomputing.
- Member of the IMACS technical committee on Dynamical Systems and Nonlinear Science, 1992 - present.
- Member of the Association of Computing Machinery (ACM).
- Member of the International Association for Mathematics and Computers in Simulation (IMACS).
- Member of the International Scientific Program Committee of the 14th IMACS World Congress on Computational and Applied Mathematics, July 11-15, 1994, Atlanta, GA.
- Member of the Institute of Electrical and Electronics Engineers (IEEE), Inc.

EDITORSHIP:

1. Guest Editor of the Special issue of the Journal Mathematics and Computers in Simulation on "Solitons, Nonlinear Wave Equations and Computation", vol. 37, No. 4-5, December 1994.
2. Guest Editor of the Special Issue of the Journal Mathematics and Computers in Simulation on "Computation of Nonlinear Phenomena", Vol. 43, No. 1, January 1997.
3. Editor of the “Book of Abstracts” for the Second IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, April 1999, Athens, GA.
4. Guest Editor of the Special Issue of the Journal Mathematics and Computers in Simulation on "Nonlinear Waves: Computation and Theory", Vol. 55, No. 4-6, March 2001.
5. Guest Editor of the Special Issue of the Journal Mathematics and Computers in Simulation on "Method of Lines", Vol. 56, Issue 2, May 2001.
6. Guest Editor of the Special Issue of the Journal Mathematics and Computers in Simulation on "Optical Solitons", Vol. 56, Issue 6, July 2001.
7. Editor of the “Book of Abstracts” for the Second IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, April 9-12, 2001, Athens, GA.
8. Guest Editor of the Special Issue of the Journal Mathematics and Computers in Simulation on “Nonlinear Waves: Computation and Theory-II”, Vol. 62, Issues 1-2, 2003.
9. Member of the Editorial Board of The International Arab Journal of Information Technology (IAJIT), 2002-present.
10. Editor of the “Book of Abstracts” for the Fourth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, April 2003, Athens, GA.

11. Guest Editor of the Special Issue of the Journal Mathematics and Computers in Simulation on "Optical Solitons-II", 2004.
12. Guest Editor of the Special Issue of the Journal Mathematics and Computers in Simulation on “Nonlinear Waves: Computation and Theory-III”, Vol. 69, issues 3-4, June 2005.
13. Guest Editor of the Special Issue of the Journal Mathematics and Computers in Simulation on “Nonlinear Waves: Computation and Theory-IV”, Vol. 69, issues 5-6, August 2005.
14. Senior Editor for the Journal Mathematics and Computers in Simulation, December 2004 – present.
15. Editor of the “Book of Abstracts” for the Fourth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, April 11 – 14, 2005, Athens, GA.
16. Editor of the “Book of Abstracts” for the Fifth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, April 16 – 19, 2007, Athens, GA.
17. Member of the Board of Directors of the International Association for Mathematics and Computers in Simulation (IMACS), August 2005 – present.
18. Guest Editor of the Special Issue of the Journal Mathematics and Computers in Simulation on “Nonlinear Waves: Computation and Theory-V”, Vol. 74, Issue 2-3, March 2007.
19. Guest Editor of the Special Issue of the Journal Mathematics and Computers in Simulation on “Nonlinear Waves: Computation and Theory-VI”, Vol. 74, Issue 4-5, March 2007.
20. Member of the Editorial Board of the International Journal of Nonlinear Dynamical Systems and Chaos (IJNDSC), 2006 – present.
21. Associate Editor-in-Chief of the International Arab Journal of e-Technology (IAJeT), 2008 – present..
22. Guest Editor of the Special Issue of the Journal Mathematics and Computers in Simulation on “Nonlinear Waves: Computation and Theory-VII”, 2009.
23. Guest Editor of the Special Issue of the Journal Mathematics and Computers in Simulation on “Nonlinear Waves: Computation and Theory-VIII, 2009-2011.
24. Guest Editor of the Seventh Volume of the International Arab Journal of Information Technology (IAJIT), 2009-2010.
25. Managing Editor of the Special Issue of the Journal Mathematics and Computers in Simulation on “Nonlinear Waves: Computation and Theory-IX”, 2009-2012.
26. Managing Editor of the Special Issue of the Journal Mathematics and Computers in Simulation on “Nonlinear Waves: Computation and Theory-X”, 2011-2012
27. Guest Editor of the Special Issue of the Journal Mathematics and Computers in Simulation on “ ”, 2012-2016
28. Managing Editor of the Special Issue of the Journal Mathematics and Computers in Simulation on “ ”, 2012-2016
29. Editor-in-Chief of the Applied Numerical Methods (APNUM) journal, March 2017 – present.

ORGANIZER/SESSION CHAIR:

1. The 8th annual Southeastern-Atlantic Regional Conference on Differential Equations, University of Georgia, Athens, GA, November 4-5, 1988.
2. The 13th IMACS World Congress on Computation and Applied Mathematics, Dublin, Ireland, July 22-26, 1991.
3. The 7th IMACS International Conference on Computer Methods for PDEs, New Brunswick, NJ, June 22-24, 1992.
4. The 2nd IMACS International Conference on Computational Physics, St. Louis, MO, October 6-9, 1993.
5. The 14th IMACS World Congress on Computation and Applied Mathematics, Atlanta, GA, July 11-15, 1994. (Two multiple sessions)
6. The First International Conference on Neural, Parallel, and Scientific Computations, Atlanta, GA, March 28-31, 1995.
7. International Conference on Pure and Applied Mathematics (ICPAM95), Bahrain, Nov. 19-22, 1995.
8. The 11th International Conference on Mathematical and Computer Modelling and Scientific Computing (ICMCM & SC), Washington, DC, March 31 - April 3, 1997.
9. The 15th IMACS World Congress on Scientific Computation, Modelling and Applied Mathematics, Berlin, Germany, Aug. 24-29, 1997.
10. Seventh International Colloquium on Numerical Analysis and Computer Science with Applications, Plovdiv, Bulgaria, Aug. 13-17, 1998.
11. Session Chair: Introducing one of the key speakers at the IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Athens, GA, April 12-15, 1999.
12. Chairman and Conference Coordinator of the IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Athens, GA, April 12-15, 1999.
13. The 16th IMACS World Congress on Computation and Applied Mathematics, Lausanne, Aug. 21-25, 2000.

14. The First SIAM conference on Computational Science and Engineering, Washington, DC, Sept. 21-24, 2000.
15. Chairman and Conference Coordinator of the Second IMACS International Conference on “Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory”, Athens, GA, April 9-12, 2001.
16. Session Chair: Introducing the first key speaker at the Second IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Athens, GA, April 9-12, 2001.
17. Publicity Chair of the 39th Annual ACM Southeast Conference, Athens, GA, March 16-17, 2001.
18. Session chair: The 39th Annual ACM Southeast Conference, Athens, GA, March 16-17, 2001.
19. Chairman and Conference Coordinator of the Third IMACS International Conference on “Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory”, Athens, GA, April 7-10, 2003.
20. Session chair: The 2002 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'02: Las Vegas, June 2002).
21. Session Chair: Introducing the first key speaker at the Third IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Athens, GA, April 7-10, 2003.
22. Program chair and conference coordinator of the Third IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Athens, GA, April 7-10, 2003.
23. Session Chair: The 2003 Arab Conference on Information Technology (ACIT’03), December 20-23, 2003, Alexandria, Egypt.
24. Session organizer and chair: “Nonlinear waves: computation and theory” at the 17th IMACS World Congress, Paris, France, July 11-15, 2005 (with Bratsos Athanasios).
25. Session Chair: The 2005 Arab Conference on Information Technology (ACIT’05), December 6-8, 2005, Amman, Jordan.
26. Session Chair at the meeting on “Mathematical Models for Complex Systems”, The Palazzone, Cortona (AR), Italy, September 26 to 29, 2007.
27. Session Chair: The 2008 Arab Conference on Information Technology (ACIT’08), December 16-18, 2008, Tunis, Tunisia.
28. Session Chair: Introducing one of the keynote speakers at the Sixth IMACS International Conference on “Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory”, Athens, GA, March 23-26, 2009.
29. Session Chair: “Internet and The Web”, December 15, 2009 at The 2009 Arab Conference on Information Technology (ACIT’09), December 15-17, 2009, University of Science and Technology, Sana’a, Yemen.
30. Session Chair: Introducing the First Key Speaker, December 16, 2009, at The 2009 Arab Conference on Information Technology (ACIT’09), December 15-17, 2009, University o9f Science and Technology, Sana’a, Yemen.
31. Session Chair: Introducing the Second Key Speaker, December 17, 2009 at The 2009 Arab Conference on Information Technology (ACIT’09), December 15-17, 2009, University of Science and Technology, Sana’a, Yemen.
32. Session Chair: Introducing the first keynote speakers at the Seventh IMACS International Conference on “Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory”, Athens, GA, April 03-07, 2011.
33. Session Chair I: at the MASCOT 2011, 11th Meeting on Applied Scientific Computing and Tools, Rome, Italy, October 19-21, 2011.
34. Session Chair II: at the MASCOT 2011, 11th Meeting on Applied Scientific Computing and Tools, Rome, Italy, October 19-21, 2011.
35. Session Chair: “AI& Expert Systems and Information Security” at The International Arabic Conference on Information Technology ACIT’2011, Riyadh, Saudi Arabia, December 11-14, 2011.
36. Session chair : “Tools for HPC(CP2)” at the SIAM Conference on Parallel Processing for Scientific Computing (PP12), Savannah, Georgia, February 15-17, 2012,
37. Director of the Minisymposia and workshops on Nonlinear Waves track at
The 19th IMACS World Congress Real Centro Universitario El Escorial-Maria Cristina, Spain, August 26, 2013 – August 30, 2013
38. Session Chair: Introducing the First Keynote Speaker, December 10, 2012 at The 2012 Arab Conference on Information Technology (ACIT’13), December 10-14, 2012, Zarqa University, Amman, Jordan.
39. An organizer and a moderator for the Big Data Meeting as a chair of the GACRC-AC, December 5, 2012. This meeting was supported by OVPIT and OVPR at UGA.
40. Session Chair at the 19th IMACS World Congress real Centro Universitario El Escorial-Maria Cristina, Spain, August 26, 2013 – August 30, 2013
41. Session Chair: “Algorithms and Applications”, at The 2013 Arab Conference on Information Technology (ACIT’14), December 17-19, 2013, Sudan University of Science and Technology. Sudan.

42. Session Chair: Introducing the First Keynote Speaker, December 18, 2013 at The 2013 Arab Conference on Information Technology (ACIT'14), December 17-19, 2013, Sudan University of Science and Technology. Sudan.
43. Session Chair: Introducing the First Keynote Speaker, March 25, 2013 at The Eighth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, March 25-28, 2013, Athens, GA, USA
44. Session organizer and chair: "Numerical simulations for solving nonlinear waves equations", at The Eighth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, March 25-28, 2013, Athens, GA, USA (with Constance Schober).
45. Session Chair: Numerical simulations for 1+2 dimensions coupled nonlinear Schrodinger type equations, Conference in Numerical Analysis 2014 (NumAn 2014), September 2-5, 2014 Chania, Greece
46. Session Chair: "SOFTWARE ENGINEERING", at The 2014 Arab Conference on Information Technology (ACIT'15), December 9-11, 2014, Nazwa University, Oman.
47. Session Chair: "SOFTWARE ENGINEERING", at The 2015 Arab Conference on Information Technology (ACIT'16), December 14-17, 2015, Amman, Jordan.
48. Session organizer and chair: "Numerical simulations for solving nonlinear waves equations", at The Ninth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, April 01-04, 2015 Athens, GA, USA.
49. Session Chair: Introducing the First Keynote Speaker, April 01, 2015 at The Ninth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, April 01-04, 2015, Athens, GA, USA
50. Session Chair: Introducing the First Keynote Speaker, at The 2016 Arab Conference on Information Technology (ACIT'16), December 6-8, 2016, Sultan Moulay Slimane University, Beni-Mellal, Morocco.
51. Session Chair: Introducing one of the Keynote Speakers, at The 2016 Arab Conference on Information Technology (ACIT'16), December 6-8, 2016, Sultan Moulay Slimane University, Beni-Mellal, Morocco.
52. Session Organizer and Chair: "Nonlinear Evolution Equations and Wave Phenomena", at The IMACS World Congress, December 10-14, 2016, Xiamen,, China
53. A member of the organizing Committee of "The Georgia Informatics Symposium", Georgia Center for Continuing Education, October 11th, 2016.

REFEREE FOR JOURNALS:

- AIMS Book Series: Differential Equations and Dynamical Systems, 2006 – 2007.
- Journal of Computational Physics
- SIAM Journal on Scientific and Statistical Computing
- SIAM Journal on Applied Mathematics
- Applied Numerical Mathematics (IMACS Journal)
- Computers and Mathematics with applications
- Mathematics and Computers in Simulation
- Numerical Mathematics for Partial Differential Equations
- IEEE Software
- Institute of Physics Publishing Research Journal, UK, 1997 – present
- Simulation: The Journal of the Society for Computer Simulation, Hong Kong
- Journal of Science and Technology/Sultan Qaboos University of Oman
- Derasat/Journal of Sciences, University of Jordan, Jordan
- Journal of Physics A: Mathematical and General
- Journal of Physics B: Molecular and Optical Physics
- Numerical Algorithms, C. Brezinski, Editor-in-Chief, France.
- Reviewer of a database book by Munib Qtaishat published by the University of Jordan, Amman, Jordan, May 1999.
- The Korean Journal of Computational and Applied Mathematics.
- Journal of Parallel and Distributed Computing.
- IEEE Transactions on Systems, Man, and Cybernetics.

REVIEWER FOR CONFERENCES/PROGRAM COMMITTEE MEMBER:

1. Symposium on Computers and Information Sciences, May 5-6, 1986, College of Science and Technology, Jerusalem.

2. The 13th IMACS World Congress on Computation and Applied Mathematics, Dublin, Ireland, July 22-26, 1991.
3. The 12th International Symposium on Distributed Computing Systems, Pacific Convention Plaza, Yokahoma, Japan, June 9-12, 1992.
4. The 21st Annual International Conference on Parallel Processing, Ann Arbor, MI, August 17-21, 1992.
5. The 7th IMACS International Conference on Computer Methods for Partial Differential Equations, June 22-24, 1992, Rutgers University, New Brunswick, New Jersey.
6. Program Committee member of The 2nd IMACS International Conference on Computational Physics, St. Louis, MO, October 6-9, 1993.
7. The 14th IMACS World Congress on Computation and Applied Mathematics, Atlanta, GA, July 11-15, 1994.
8. The First International Symposium on High-Performance Computer Architecture (HPCA), Raleigh, North Carolina, Jan. 22-25, 1995.
9. The 15th IMACS World Congress on Scientific Computation, Modelling and Applied Mathematics, Berlin, Germany, Aug. 24-29, 1997.
10. Program Committee member of the First Southern Symposium on Computation, University of Southern Mississippi, Hattiesburg, MS, Dec. 4-5, 1998.
11. Chair of the Scientific Program Committee of the IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Athens, GA, April 12-15, 1999.
12. The 16th IMACS World Congress on Computation and Applied Mathematics, Lausanne, Aug. 21-25, 2000.
13. Chair of the Scientific Program Committee of the Second IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Athens, GA, April 9-12, 2001.
14. The 39th Annual ACM-SE Conference, Athens, GA, March 16-17,2001.
15. A member of the Steering Committee of the 2000 Arab Conference on Information Technology (ACIT' 2000) Oct. 31 – Nov. 2, 2000, Zarka, Jordan.
16. A member of the Steering Committee of the 2001 Arab Conference on Information Technology (ACIT' 2000) Nov. 13 – 15, 2001, Jordan University of Science and technology, Jordan.
17. Chair of the Scientific Program Committee of the Third IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Athens, GA, April 7-10, 2003.
18. A member of the Steering Committee of the 2002 Arab Conference on Information Technology (ACIT'2002) December 16-19, 2002, Doha, Qatar.
19. A member of the Review Committee of Applied Mathematics, Operational Research and Optimization Symposium held under the CESA'2003 in Lille, France, July 9-11, 2003.
20. A member of the Steering Committee of the 2003 Arab Conference on Information Technology (ACIT'2003) December 20-23, 2003, Alexandria, Egypt.
21. A member of the Steering Committee of the 2004 Arab Conference on Information Technology (ACIT'2004) December 12-15, 2004, Mentouri University of Constantine, Algeria.
22. A reviewer for the 2004 Arab Conference on Information Technology (ACIT'2004) December 12-15, 2004, Mentouri University of Constantine, Algeria.
23. Program Chair and conference coordinator of the Fourth IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Athens, GA, April 11-14, 2005.
24. A reviewer for the 17th IMACS World Congress, Paris, France, July 11-15, 2005.
25. A member of the International Program Committee for the 17th IMACS World Congress, Paris, France, July 11-15, 2005.
26. A member of the Steering Committee of the 2005 Arab Conference on Information Technology (ACIT'2005), Al-Isra Private University, Jordan December 6-8, 2005.
27. A reviewer for the 2005 Arab Conference on Information Technology (ACIT'2005) December 6 – 8, 2005, Al-Isra Private University, Jordan.
28. A reviewer for the 2006 Arab Conference on Information Technology (ACIT'2006) December 19-21, 2006, Yarmouk University, Jordan.
29. A member of the Steering Committee of the 2006 Arab Conference on Information Technology (ACIT'2006), December 19-21, 2006, Yarmouk University, Jordan.
30. Program Chair and conference coordinator of the Fifth IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Athens, GA, April 16-19, 2007.
31. Chair of the Scientific Program Committee of the Fifth IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Athens, GA, April 16-19, 2007.
32. A Member of the Program Committee of the 3rd International Conference on IT; ICIT 2007, Al-Zaytoonah University, Jordan, May 9-11, 2007.
33. A member of the Steering Committee of the 2007 Arab Conference on Information Technology (ACIT'2007), November 26-28, 2007, Arab Academy for Science and Technology, Lattakia, Syria.

34. A member of the Steering Committee of the IACeT'2008 International Arab Conference on e-Technology, October 15-16, 2008, Arab Open University, Amman-Jordan, Jordan.
35. A member of the Steering Committee of the 2008 Arab Conference on Information Technology (ACIT'2008), December 16-18, 2008, University of Sfax, Hammamet City-Tunisia, Tunisia.
36. A Reviewer for the 2008 Arab Conference on Information Technology (ACIT'2008), December 16-18, 2008, University of Sfax, Hammamet City-Tunisia, Tunisia.
37. Program Chair and Conference Coordinator of the Sixth IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena:" Computation and Theory", Athens, GA, March 23-26, 2009.
38. Member of the Program Committee of the 3rd International Conference on IT; ICIT 2009, Al-Zaytoonah University, Jordan, June 3-5, 2009.
39. Program Chair and Conference Coordinator of the "IMACS World Congress on Computational and Applied Mathematics & Applications in Science and Engineering", Athens, GA, August 3-7, 2009.
40. Program Chair and Workshop Coordinator of the "Workshop on Mathematical Biology and Numerical Analysis", Athens, GA, August 1-2, 2009.
41. Chair of a Session at the MASCOT 2010 Conference, Las Palmas de Gran Canaria, Spain, Oct 22-22, 2010.
42. Member of the Steering Committee for The 11th International Arab Conference on Information Technology (ACIT 2010), Benghazi-Libya, December 14-16, 2010.
43. Program Chair and Conference Coordinator of the Seventh IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena:" Computation and Theory", Athens, GA, April 3-7, 2011.
44. Chair of the Scientific Program Committee of the Seventh IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Athens, GA, April 3-7, 2011.
45. Member of the International Program Committee of The 5th International Conference on Information Technology, May 11-13, 2011, AL-Zaytoonah University of Jordan, ICIT'11, Amman, Jordan.
46. Member of the Steering Committee for the 12th International Arab Conference on Information Technology (ACIT 2011), Riyadh, December 11-14, 2011.
47. Member of the Steering Committee for the 13th International Arab Conference on Information Technology (ACIT 2012), Zarqa University, Amman, Jordan, December 10-14, 2012.
48. Program Chair and Conference Coordinator of the Eighth IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena:" Computation and Theory", Athens, GA, March 25-28, 2013.
49. Member of the Scientific Program Committee of the Eighth IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena:" Computation and Theory", Athens, GA, March 25-28, 2013.
50. *A member of the organizing committee of The 19th IMACS World Congress Real Centro Universitario El Escorial-Maria Cristina, Spain, August 26, 2013 – August 30, 2013*
51. A member of the International Program Committee *of The 19th IMACS World Congress Real Centro Universitario El Escorial-Maria Cristina, Spain, August 26, 2013 – August 30, 2013.*
52. A member of the Scientific Committee of the "Conference on Nonlinear Systems and Summer School" in Katmandu, Nepal, May-June 2013.
53. Program Chair and conference coordinator of the Eighth IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Athens, GA, March 25-28, 2013.
54. Chair of the Scientific Program Committee of the Eighth IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Athens, GA, March 25-28, 2013.
55. A member of the Steering Committee for the 2013 Arab International Conference on Information Technology (ACIT'14), December 17-19, 2013, Sudan University of Science and Technology, Sudan.
56. A member of the International Program Committee for The Fifth International Symposium on Innovations in Information & Communications Technology (ISIICT 2014),22-24 April, 2014, Philadelphia University, Amman Jordan
57. A member of the Steering Committee for the 2014 Arab International Conference on Information Technology (ACIT'15), December 9-11, 2014, Nazwa, Oman
58. A member of the Steering Committee for the 2015 Arab International Conference on Information Technology (ACIT'16), December 15-17, 2015, Al-Isra University, Jordan
59. Program Chair and conference coordinator of the Ninth IMACS International Conference on "Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory", Athens, GA, April 01 – 04, 2015.
60. Member of the International Scientific Program Committee of the 20th IMACS World Congress, December 10-14, 2016,,Xiamen University, China
61. A member of the organizing Committee of the 20th IMACS World Congress, December 10-14, 2016,Xiamen University, China
62. A member of the Steering Committee for the 2016 Arab International Conference on Information Technology (ACIT'16), December 6-8, 2016, Beni-Mellal, Morocco.
63. A member of the International Advisory Committee for the 8th. International Conference on Information Technology, Al-Zaytoona University, Jordan, May 17-18, 2017

REVIEWER FOR FUNDING AGENCIES:

- NSF grant proposals
- External reviewer of a grant proposal submitted to the Sultan Qaboos University, Muscat, Oman.
- External Reviewer: Board of Regents Support Fund (RCS proposals) for Fiscal Year 2002-03, Louisiana.
- Member of an NSF Numerical Computing Panel, July 31 - August 1, 2006.
- Member of an NSF BigData Panel, July, 2015.

REVIEWER FOR PUBLISHING COMPANIES:

- Brooks/Cole publishing: reviewer for Ward Cheney and David Kincaid's Numerical Mathematics and Computing, 6th edition, 2006.
- West Educational Publishing, a division of West Services, Inc.
- Macmillan Publishing Company, a division of MacMillan, Inc.
- PWS-Kent Publishing Company
- Kluwer Academic Publishers
- Addison Wesley Publishers

OTHER ACTIVITIES:

1. External evaluator for promotion of a computer science faculty member at the University of Jordan, Amman, Jordan, 1999.
2. External evaluator for promotion of a computer science faculty member at the Zarka Private University in Jordan, 1999.
3. External evaluator for a promotion of a computer science faculty member at the Princess Summya University College for Technology, Jordan, April 2000.
4. External evaluator for a promotion of a computer science faculty member at the Sultan Qaboos University, Muscat, Oman, May 2000.
5. External evaluator for promotion of a computer science faculty member at the Zarka Private University in Jordan, 2000.
6. External evaluator for promotion of a computer science faculty member at the Zarka Private University in Jordan, 2002.
7. External evaluator for a promotion of a computer science faculty member at the Sultan Qaboos University, Muscat, Oman, October 2004.
8. Evaluator of the Excellence in Research by Graduate Students Award nominees, UGA, 2004.
9. External evaluator for a promotion of a Computer Science faculty member at King Abdul Aziz University, Jeddah, Kingdom of Saudi Arabia, December 2005.
10. Judge for the Who's Who competition, Graduate School at UGA, 2005, 2006.
11. External evaluator for promotion of a computer science faculty member at the Al Isra Private University in Jordan, 2006.
12. External evaluator for promotion of a computer science faculty member at the Philadelphia University in Jordan, 2006
13. External evaluator for a promotion of a computer science faculty member at the Sultan Qaboos University, Muscat, Oman, May 2006.
14. External evaluator for a promotion of a computer science faculty member at the Open Arab University, Kuwait, August, 2007.
15. External evaluator for the Quality Improvement Fund (QIF) for the Palestinian Tertiary Education Project that is funded by The World Bank – International Development Association, and the European Union (EU), June 2007.
16. External evaluator for promotion of a computer science faculty member at the University of Jordan, Amman, Jordan, 2007.
17. External evaluator for promotion of a Computer Science faculty member at the University of Jordan, Amman, Jordan, April, 2008.
18. External evaluator for promotion of a Computer Science faculty member at the University of Jordan, Amman, Jordan, May, 2008.
19. External evaluator for promotion of a Computer Science faculty member at the Middle East University for Graduate Studies, Amman, Jordan, June, 2008.

20. External evaluator for promotion of a Computer Science faculty member at the University of Jordan, Amman, Jordan, July, 2008.
21. External evaluator for promotion of a Computer Science faculty member at the University of Jordan, Amman, Jordan, August, 2009.
22. External evaluator for promotion to a Full Professor for Adel Boules, University of North Florida, August 2010.
23. External evaluator for promotion to a Full Professor of a Computer Science faculty member at the University of Jordan, Amman, Jordan, May 2010.
24. External evaluator for promotion to an Associate Professor of a Computer Science faculty member at the Zarka Private University, Jordan, May 2010.
25. External evaluator for promotion to a Full Professor for Adel Boules, University of North Florida, August 2011.
26. External evaluator for promotion to a Full Professor of a Computer Science faculty member at the University of Jordan, Amman, Jordan, February 2011.
27. External evaluator for promotion to a Full Professor of a Computer Science faculty member at the University of Jordan, Amman, Jordan, February 2012.
28. External evaluator for promotion to a Full Professor for Baofeng Feng, Math Department, The University of Texas-Pan American, USA, 2012
29. Attending the Coalition for Academic Scientific Computing (CSCS) Spring Meeting, VA, February 29th - March 2nd 2012 and Fall meeting in Arlington, VA, October 3rd - 5th, 2012 on behalf of the GACRC at UGA. CASC is an educational nonprofit organization with 71 member institutions representing many of the nation's most forward- thinking universities and computing centers. CASC is dedicated to advocating the use of the most advanced computing technology to accelerate scientific discovery for national competitiveness, global security, and economic success, as well as develop a diverse and well prepared 21st century workforce.
30. Attending the SIAM Conference on Nonlinear Waves and Coherent Structures, June13-16, 2012, The University of Washington, Seattle, WA, USA. This is in part supported from my NSF grant (**Award Number:** 1048816) to recruit underrepresented participants for the Eighth IMACS conference to be held in March 25-28, 2013, UGA, Athens, Georgia.
31. Attending the yearly meeting of the Deans of the Information Technology of the Arab Universities who are members of the Arab league universities, December 09., 2012, Zarqa University, Jordan.
32. Attending the third annual GPU Technology Conference (GTC) sponsored by Nvidia, the world's most important event showcasing breakthroughs in computational science with the GPU (graphics processing unit), San Jose's McEnery Convention Center, May 14-17, 2012.
33. A member of the External Review Team for Accreditation of Diploma in Information Technology in University of Sharjah (UoS), 20–24 October 2013
34. External evaluator for promotion of a computer science faculty at the University of Jordan, Amman, Jordan, 2014.
35. External evaluator for promotion of a computer science faculty at the Zarka Private University in Jordan, 2014.
36. A member of the External Review Team for Renewal of Accreditation Master of Science in Information Systems, Ajman University of Science and Technology December 16-20, 2016

TRAINEE COURSES ON PARALLEL COMPUTERS:

1. Cyber 205 Training Seminar, University of Georgia, ACMC, August 31 – September 4, 1987.
2. A short course on Parallel Computation, organized by Lloyd Fosdick, SIAM 35th Anniversary Meeting, Denver, Colorado, October 11, 1987.
3. IBM 3090 Vector Seminar, University of Georgia, March 23-24, 1988.
4. Two Intel scientific computer training courses on the Hyper-cube, Beaverton, Oregon, June 13-17, 1988.
5. Teaching Parallel Computing, Portland, Oregon, April 28 - May 1, 1991.
6. Forum on Parallel Computing Cirricula, Wellesley College, MA, March 31 - April 1, 1995.
7. SGI Origin 2000 Seminar, University of Georgia, Jan. 22-23, 1998.

Workshops:

1. Computational Science Education Project (CSEP) Workshop for Educators, August 15-17, 1994 at Cornell Theory Center, Ithaca, NY. Sponsored by the Department of Energy and Co-sponsored by the National Science Foundation $1,206.75.

2. 1995 Academic Affairs Faculty Symposium "Peer Review: The Scholarship of Teaching", sponsored by UGA, Helen, GA, April 7-8, 1995.
3. Method of Lines for Time-Dependent Problems, University of Kentucky, May 31 - June 4, 1995.
4. Workshop on Teaching Calculus Using Computers, Mutah University, Jordan, April 8-10, 1996.
5. Symposium on "Preparing the Fulbright Exchange Program for the 21st Century", Emory University, The Carter Center, Atlanta, GA, Dec. 6, 1996.
6. Workshop on ABET accreditation, Clemson University, SC, Aug. 2009.
7. MathWorks: Workshop on Parallel Computing with Matlab at the University of Georgia, 10/25/2011.
8. OPENACC GPU Programming workshop that has been sponsored by The Pittsburgh Supercomputing Center, the National Institute for Computational Sciences and Georgia Tech University of South Carolina, SC, October 16-17, 2012.
9. Organized two workshops on "CUDA programming for GPUs", March 2012, UGA.
10. Organized two workshops on "CUDA programming for GPUs", April 2013, UGA.
11. Workshop Organizer, CUDA programming for GPU's (Athens, GA), April 2014.

REFEREED JOURNAL PUBLICATIONS:

1. Discovering Regulatory Network Topologies Using Ensemble Methods on GPGPUs With Special Reference to the Biological Clock of *Neurospora crassa*, AHMAD AL-OMARI, JAMES GRIFFITH, MICHAEL JUDGE, THIAB TAHA, JONATHAN ARNOLD, AND H-BERND SCHÜTTLER, IEEE ACCESS, Received January 16, 2015, accepted February 1, 2015, date of publication February 3, 2015, date of current version February 18, 2015. *Digital Object Identifier, 10.1109/ACCESS.2015.2399854.*
2. M. S. Ismail and Taha, Thiab R., "Parallel Methods and Higher Dimensional NLS Equations", Abstract and Applied Analysis Journal, Volume 2013 (2013), Article ID 497439, http://dx.doi.org/10.1155/2013/497439.
3. Al-Omari, Ahmad, Schuttler, Heinz-Bernd, Arnold, Jonathan, and Taha, Thiab, "Solving Nonlinear Systems of First Order Ordinary Differential Equations Using a Galerkin Finite Element Method", *IEEE ACCESS*, May 2013, pp. 408-417.
4. A. Al-Omari, J. Arnold ,T. Taha, and H.-B. Schuttler. 2013.Solving large Nonlinear Systems of First-order Ordinary Differential Equations with Hierarchical Structure Using Multi-GPGPUs and an Adaptive Runge Kutta ODE Solver. IEEE Access. DOI 10.1109/ACCESS.2013.2290623
5. Arnold, Jonathan, Taha, Thiab and Deligiannidis, Leonidas, "GKIN: A Tool for Drawing Genetic Networks", Network Biology Journal, 2012, 2(1):26-37.
6. Triki, Houria and Taha, Thiab, "Solitary Wave Solutions for a Higher Order Nonlinear Schrödinger Equation", Journal Mathematics and Computers in Simulation,82(2012), pp. 1333-1340.
7. Triki, Houria, Taha, Thiab and Wazwaz, A., "Solitary Wave Solutions for a Generalized KdV-mKdV Equation with Variable Coefficients", *Mathematics and Computers in Simulation*, 80(9): 1867-1873, 2010.
8. Triki, Houria and Taha, Thiab, "Exact Analytical Solitary Wave Solutions for the RKL Model", *Journal Mathematics and Computers in Simulation*, 80(2009), pp. 849-854.
9. B. Aleman-Meza, Y. Yu, H-B. Schuttler, J. Arnold, and T. Taha, "KINSOLVER: A Simulator for Computing Large Ensembles of Biochemical and Gene Regulatory Networks", *Computers and Mathematics with Applications*, Vol 57 (2009), pp. 420-435
10. Triki, Houria and Taha, Thiab, "On the Calculation of the Timing Shifts in the Variable-coefficient Korteweg-de Vries Equations", *Journal Mathematics and Computers in Simulation*, Vol. 80, Issue 1, 2009, pp. 212-222.
11. Triki, Houria and Taha, Thiab, "Calculation of Timing and Amplitude Jitter in a Dispersion-manage Korteweg-de Vries System", the *Journal Mathematics and Computers in Simulation*, 80(2009), pp. 660-665.
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2. On comparisons between numerical schemes which are based on the Inverse scattering transform and certain known numerical schemes for the KdV and nonlinear Schrödinger equations, Florida State University, April 5, 1982, Mathematics Colloquium.
3. On numerical and analytical aspects of certain nonlinear evolution equations. I. University of Georgia, Physics Department, September 29, 1982.
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12. IST numerical schemes for solving nonlinear evolution equations. Computer Sci. Dept., University of Jordan, Amman, Jordan, April 13, 1986.
13. On Comparison of numerical methods for solving Quasi-Tridiagonal systems of equations, presented at the Symposium on Computers and Information Sciences, May 5-6, 1986, College of Science and Technology, Jerusalem.
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16. Numerical methods for solving differential equations, presented at the SIAM 35th Anniversary Meeting, Denver, Colorado, October 12-15, 1987.
17. Derivation and implementation of numerical methods for nonlinear evolution equations solvable by IST, University of Georgia, Seminar in Mathematics, Physics, and Computations, January 28, 1988.
18. On comparison of numerical methods for solving differential equations subjected to periodic boundary conditions, The 8th annual Southeastern-Atlantic Regional Conference on Differential Equations, University of Georgia, Athens, GA, November 4-5, 1988.
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21. A parallel algorithm for solving higher KdV equations on a Hypercube, presented at the Fifth Distributed Memory Computing Conference, Charleston, SC, April 9-12, 1990.
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26. A Parallel algorithm for an Investigation of a Self-Focusing Singularity of Higher KdV Equations, presented at the Fifth Conference on Domain Decomposition Methods for PDES, Norfolk, VA, May 6 - 8, 1991.
27. A Differential-Difference Equation for Higher Nonlinear Schrödinger Equation, presented at the 13th IMACS World Congress on Computation and Applied Mathematics, Dublin, Ireland, July 22-26, 1991.
28. A Parallel-Vector Algorithm for an Investigation of a self focusing Singularity of HKdV Equation, presented at the Tenth Parallel Circus, Oak Ridge, October 25-26, 1991.
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30. A Parallel-Vector Algorithm for solving higher KdV Equations, presented at the Permian Basin Supercomputing Conference, Odessa, Texas, March 13-15, 1992.
31. Nonlinear Evolution Equations, presented at the Georgia Tech-UAB International Conference on Differential Equations and Mathematical Physics, Atlanta, GA, April 22-28, 1992.
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47. IST numerical methods, Universite Cadi Ayyad, Marrakkech, Morocco, April 23, 1996, (Invited by the (MACECE).
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53. A Parallel Algorithm for Numerical Simulations of KdV-Like Equations, presented as an **invited** 40 minute lecture at the Seventh International Colloquium on Numerical Analysis and Computer Science with Applications, Plovdiv, Bulgaria, Aug. 13-17, 1998.
54. Numerical Simulations of KdV-Like Equations, presented as an **invited** 40 minute lecture at the Ninth International Colloquium on Differential Equations, Plovdiv, Bulgaria, Aug. 18-23, 1998.
55. A survey of Inverse Scattering Transform Numerical Schemes, presented at the 1999 IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Athens, GA, April 12-15, 1999.
56. Numerical Simulations of Coupled Nonlinear Schrödinger Equation, presented at the 1999 SIAM Annual Meeting, Atlanta, GA, May 12-15, 1999.
57. Numerical Simulations of Compacton Equations, presented at the 1999 SIAM Annual Meeting, Atlanta, GA, May 12-15, 1999.
58. A Parametric Linearized Finite-difference Method for the Solution of the Nonlinear Cubic Schrödinger Equation, presented at the 16th IMACS World Congress on Computation and Applied Mathematics, Lusanne, Aug. 12-15, 2000.
59. A Finite Element Solution for the Coupled Schrödinger Equation, presented at the 16th IMACS World Congress on Computation and Applied Mathematics, Lusanne, Aug. 12-15, 2000.
60. Spit-step Fourier Algorithms for the Complex Modified Korteweg-de Vries Equation – Numerical Simulations, the Second IMACS International Conference on Nonlinear Evolution equations and Wave Phenomena: Computation and Theory, Athens, GA, April 9-12, 2001.
61. Parallel Split-Step Fourier Methods for the Nonlinear Schrödinger Equations, The 2002 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'02: Las Vegas, June 2002).
62. A Parallel Split-Step Method for the CNLS Equation, The International Arabic Conference on Information Technology ACIT'2002, University of Qatar, Doha - Qatar, December 16-19, 2002.

63. Parallel Numerical Simulation of Nonlinear Schrödinger Type Equations, the Third IMACS International Conference on Nonlinear Evolution equations and Wave Phenomena: Computation and Theory, Athens, GA, April 7-10, 2003.
64. Parallel Split-Step Fourier Methods for the CMKdV Equations, The 2003 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'03: Las Vegas, June 2003).
65. A Parallel Algorithm for Numerical Simulation of WDM Optical Fiber Communication Systems, The 2003 Arab Conference on Information Technology (ACIT'03), December 20-23, 2003, Alexandria, Egypt.
66. Parallel Computing: Introduction and Applications, Institute of Bioinformatics (IOB), UGA, November 11, 2004.
67. "Parallel Numerical Methods for Solving Nonlinear Evolution Equations", presented as an invited talk at the "International Conference on Nonlinear Waves, Integrable systems and Applications", June 4 – 8, 2005, University of Colorado at Colorado Springs, Colorado.
68. "Parallel Split-step Fourier Methods for the CMKdV Equation", presented at the *17th IMACS World Congress on Computation and Applied Mathematics*, Paris, France, July 11-15, 2005.
69. "A Linearly Implicit Conservative Scheme for the CNLS Equation", presented at the *17th IMACS World Congress on Computation and Applied Mathematics*, Paris, France, July 11-15, 2005.
70. "GKIN: A graphical User Interface for KINSOLVER", presented at *The International Arabic Conference on Information Technology ACIT'2005*, Al Isra Private University, Amman, Jordan, December 6-8, 2005.
71. "Parallel Numerical Methods for Solving Nonlinear Evolution Equations", presented at *The International Arabic Conference on Information Technology ACIT' 2006*, Yarmouk University, Irbid, Jordan, December 19-21, 2006.
72. "Parallel Numerical Methods for Solving Nonlinear Evolution Equations", presented at The University of Graduate Studies, Amman, Jordan, December 18, 2006.
73. "Web Based Interface for Numerical Simulations of Nonlinear Evolution Equations", presented at the *Fifth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory*, Athens, GA, April 16-19, 2007.
74. "Parallel Numerical Methods for Solving Nonlinear Evolution Equations that model Optical Fiber Communication Systems", The 2008 SIAM Conference on Parallel Processing for Scientific Computing, March 12-14, 2008, Atlanta, GA.
75. "Parallel Numerical Methods for Solving Nonlinear Evolution Equations", The 7th AIMS Conference on Dynamical Systems and Differential Equations, University of Texas at Arlington, Texas, May 18-21, 2008.
76. "Solitary Wave Solutions for the NLSE with Higher Order Effects", presented at *The International Arab Conference on Information Technology, ACIT'2008*, December 16-18, 2008, Tunis, Tunisia.
77. "Parallel Numerical Methods for Solving Nonlinear Evolution Equations", presented at *The International Arab Conference on Information Technology, ACIT'2008*, December 16-18, 2008, Tunis, Tunisia.
78. "A Tool to Exercise Numerical Simulation Algorithms", presented at the *Sixth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory*, Athens, GA, March 23-26, 2009.
79. "Web Based Interface for Numerical Simulations of Nonlinear Evolution Equations", presented as an invited talk at The 2009 Arab Conference on Information Technology (ACIT'09), December 15, 17, 2009, University of Science and Technology, Sana'a, Yemen.
80. Keynote Speaker: Keynote on Behalf of the Steering Committee, December 15, 2009, of The 2009 Arab Conference on Information Technology (ACIT'09), December 15-17, 2009, University of Science and Technology, Sana'a, Yemen.
81. Invited Keynote "Parallel Numerical Methods for Solving Nonlinear Evolution Equations", the MASCOT 2010 Conference, Las Palmas de Gran, Spain, Oct. 20-22, 2010.
82. Invited talk "Parallel Numerical Methods for Solving Nonlinear Evolution Equations", The First International Conference on Integrable Systems and Nonlinear Waves on the Gulf of Mexico, In Honor Of Yuji Kodama's 60th Birthday, June 10-14, 2010, at South Padre Travelodge, South Padre Island, Texas.
83. "Numerical Simulations for 1+2 dimensional nonlinear Schrödinger type equations", The 11th International Arab Conference on Information Technology (ACIT 2010), Benghazi- Libya, December 14-16, 2010.
84. Invited Keynote, "Nonlinear Waves" Georgia Scientific Computing Symposium Saturday, February 12, 2011, Emory University.
85. "A GUI Based Tool to Exercise Numerical Simulation Algorithms", presented at the Seventh IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Athens, GA, April 03-07, 2011.
86. Invited Talk: "Finite Difference methods for Numerical Simulations for 1+2 Dimensional NLS Type Equations", The 12th International Arab Conference on Information Technology (ACIT 2011), December 11-14, 2011, Riyadh, Saudi Arabia.

87. Invited Keynote: “Numerical Methods for Numerical Simulations for 1+2 Dimensional NLS Type Equations”, the MASCOT 2011 Conference, Rome, Italy, Oct. 18-21, 2011.
88. *Invited talk* “Parallel Numerical Methods for Solving 1+2 Dimensional Nonlinear Schrodinger Type Equation” at the SIAM Conference on Parallel Processing for Scientific Computing (PP12), February 15-17, 2012, Savannah, Georgia.
89. Invited Talk: “Numerical Simulations for 1+2 Dimensional CNLS Type Equations”, The 13th International Arab Conference on Information Technology (ACIT 2012), December 10-14, 2012, Amman, Jordan.
90. Invited talk at the 2nd International Workshop on Nonlinear and Modern Mathematical Physics, March 9-11, 2013 (http://math.usf.edu/2ndNMMP/), Tampa, Florida.
91. Invited Talk: “Numerical Simulations for 1+2 Dimensional Coupled Nonlinear Schrodinger Equations”, the 19th IMACS World Congress Real Centro Universitario El Escorial-Maria Cristina, Spain, August 26, 2013-August 30, 2013.
92. Invited Talk: “PARALLEL NUMERICAL SIMULATIONS for 1+2 DIMENSIONAL COUPLED NONLINEAR SCHRÖDINGER TYPE EQUATIONS”, The 2013 Arab Conference on Information Technology (ACIT’14), December 17-19, 2013, Sudan University of Science and Technology, Sudan.
93. Thiab Taha: “ Using CUDA for GPUs with MPI to solve nonlinear evolution equations”, presented at the Eighth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Athens, GA, March 25-28, 2014.(co-author: Jennifer Rouan)
94. Thiab Taha, “A GUI tool for numerical simulation methods”, presented at the Eighth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, Athens, GA, March 25-28, 2014.(co-author: Leonidas Deligiannidis)
95. Invited Talk: NUMERICAL SIMULATIONS for 1+2 DIMENSIONAL COUPLED NONLINEAR SCHRDINGER TYPE EQUATIONS, Conference in Numerical Analysis 2014 (NumAn 2014), September 2-5, 2014 Chania, Greece
96. INVITED Talk: HIGH PERFORMANCE COMPUTING USING CUDA PROGRAMMING ON GPUS, The 15th International Arab Conference on Information Technology (ACIT 2014), December 9-11, 2014, Nazwa, Oman
97. INVITED Talk: HIGH PERFORMANCE COMPUTING and Big Data Challenges, The 16th International Arab Conference on Information Technology (ACIT 2015), December 14-17, 2015, Amman, Jordan.
98. Invited Keynote: HIGH PERFORMANCE COMPUTING and Big Data Challenges, *MASCOT2015 - 14TH MEETING ON APPLIED SCIENTIFIC COMPUTING AND TOOLS*, Rome, Italy, June 09-12, 2015.
99. Invited talk: NUMERICAL SIMULATIONS for NONLINEAR SCHRÖDINGER TYPE EQUATIONS”, at The IMACS World Congress, December 10-14, 2016, Xiamen,, China
100. Invited Talk: Big Data and High Performance Computing and new developments, The 2016 International Arab Conference on Information Technology (ACIT 2016), December 608, 2016,Ben_Mellal, Morocco.

MAJOR PROFESSOR FOR THE FOLLOWING STUDENTS:

1. S.T. Tsai "On Comparison of numerical methods for solving second order differential equations", MAMS, Summer 1983.
2. P.C. Chao "Comparison of running time of different computer systems utilized in solving certain nonlinear evolution equations by several numerical methods", MAMS, Summer 1985.
3. Ling Zhong "A comparison of parallel algorithms for the solution of tridiagonal linear systems of equations", MAMS, Spring 1989.
4. Lingjia Zeng, "Parallel algorithms for solving periodic banded linear systems of equations on a hypercube", MAMS, Summer 1990.
5. Jerjiann Liaw, "An algorithm for solving a 4-diagonal Toeplitz linear system of equations on vector computers", MAMS, Fall 1991.
6. Peiqing Jiang, "Parallel and Vector Algorithms for Solving Toeplitz Systems", MS, Summer 1992.
7. Peng Lu, "Domain Decomposition Methods with Correction in Piecewise Harmonic Function Space", MS, Summer 1995.
8. Nikolla P. Qafoku, "PV96", A mini model for continuous simulation of solute transport and other chemical phenomena in variable charge soils", MAMS, Fall 1998.
9. Boanerg Aleman Meza, “Advances in Numerical Solution of Kinetics Reactions”, MSCS, 2001.
10. Xiangming Xu, “Paralel Split-Step Fourier Methods for the Nonlinear Schrödinger Equations”, MSCS, 2001.

11. Ruihan Liu, "Numerical and Parallel Algorithms for the CMKdV Equation", MSCS, 2001.
12. Xiaoging Zeng, "Web-Based Simulation of Lake Lanier Water Quality", 2001.
13. Yihai Yu, "Stiff Problems in Numerical Simulation of Biochemical and Gene regulatory Networks", 2004.
14. Ryan Foster, MSCS, "Web Based Interface for Numerical Simulations of Nonlinear Evolution Equations", May 2007.
15. Shanshan Ding, MAMS, "Applying Mean-Reverting in Pricing European Options", August 2007.
16. Shruti Pai, in progress
17. Wei Yu, MS, "Numerical Methods for the Two Dimensional Nonlinear Schrodinger Equation", December 2010.
18. Harini Medikonduru, MS, "Numerical Methods for the Two Dimensional Coupled Nonlinear Schrodinger Equation", May 2012.
19. Jennifer Rouan, MS, May 2014
20. Ahmad Al-Orami, Major co-advisor, IPhD, OB, March 2015
21. Brandon Posey, MAMS, in progress
22. BITA Kazemi Zahrani, MS in CS, November 2015.
23. Dileep Bodanki, MS, December 2016
24. Karen Aguar, PhD, in Progress.
25. Milad Makkie, PhD, in progress

Member of the reading committee for the following Ph.D. students:

1. Shafiuddin Ahmad, Department of Economics, College of Business Administration, UGA, 1988.
2. Munif Qtaishat, School of Education, UGA, 1988.
3. Ping-Cheng Chao, School of Education, UGA, 1990.
4. Randy B. Stepp, College of Business Administration, UGA, 1991.
5. Jon A. Higbie, College of Business Administration, UGA, 1992.
6. Moon Sig Kang, College of Business Administration, UGA, 1993.
7. Lakshmi Sundaram, College of Business Administration, UGA, 1993.
8. Guangming Xing, Computer Science Dept., UGA, 2001
9. Jinhua Guo, Computer Science Dept., UGA, 2002
10. Gita Williams, Computer Science Dept., UGA, 2003
11. Rabia Jafri, Computer Science Dept., UGA, 2009
12. Junfeng Qu, Computer Science Dept., UGA, 2004
13. Phillipa Rhodes, Computer Science Dept., UGA, 2007
14. Osama Al-Haj Hassan, Computer Science Dept., UGA, 2010.
15. Tomasz Oliwa, Computer Science Dept., UGA, 2010- present.

Member of the advisory committee for 46 M.S. and 22 MAMS students.

UNIVERSITY SERVICE:

1. Appointed to the Graduate Faculty (Provisional) February 1985.
2. Appointed to the Graduate Faculty (Regular) October 1988.
3. Appointed to the Graduate Faculty of Applied Quantitative Sciences as a member of the Mathematics Subfaculty, January 1989.
4. Member of the Franklin College of Arts and Sciences Faculty Senate Fall 1990 – 1993.
5. Member of the Academic Standards Committee of the Franklin College of Arts and Sciences 1990 – 1991.
6. Member of the Steering Committee of the Graduate Faculty of Applied Quantitative Sciences since July 1, 1991.
7. Member of the Senate Ad Hoc Committee on Worker Health and Safety, 1991 – 1992.
8. Member of the Awards Committee of the Franklin College of Arts and Sciences 1991 – 1992, 2006 – 2007.
9. Member of the Awards Committee of the Franklin College of Arts and Sciences 1992 – 1993, Chair.
10. Member of the Committee on Committees of the Franklin College of Arts and Sciences 1992 – 1993.
11. Member of the Physical Sciences Committee on Appointment/Reappointment to the Graduate Faculty 1989 – 1993, 2006 – 2009.
12. Member of the Franklin College promotion committee, 1994 – 1995 & 1996 – 1997.
13. Member of the Area Committee for Physical Sciences on Appointment/Reappointment to the Graduate Faculty, 1996 – 1999.
14. Member of the Academic Honesty Panelists, 1997 – present.

15. Member of the University Council, 1998 – 2001, 2004- 2007, 2008-2017.
16. Member of the University Committee on Student Affairs, 1998 – 2001.
17. Member of the Physical and Mathematical Science Committee – Faculty Research Grants, 1998 – 2001 (Chair: 1999).
18. External member of the Recruitment Committee, Department of Religion, 1999.
19. University Review Committee (Physical Sciences) for the 2001 – 2004 promotion and tenure.
20. University Review Committee (Physical Sciences) for the 2007 – 2010 promotion and tenure.
21. Member of the Graduate Council, 2002 – 2005.
22. Member of the Curriculum Committee for the Graduate Council 2002 – 2005, chair 2004 – 2005.
23. Chair of the McCay Award Committee, Mathematics Department, UGA, 2005.
24. Member of Post-Tenure Review Appeals Committee, University Council, 2006 – 2008.
25. Member of The Search Committee for the Computer Systems Engineering positions, Faculty of Engineering, 2006 – 2008, 2010-2012.
26. Member of the Faculty of Engineering.
27. Member of the Institute of Bioinformatics.
28. Member of the Lamar Dodd Creative Research Award Selection Committee, 2007 – 2010.
29. Judge for the UGA nominee for the Council of Graduate Schools (CGS)/UMI Distinguished Award competition in the field of Mathematics, Physical Sciences and Engineering, 2008, Graduate School, UGA.
30. Member of the Committee on Facilities, University Council Representative, 2008 – 2011.
31. Member of the Curriculum Committee of CSEE, 2010-present.
32. Member and the Chair-elect of the Research Advisory Computing Committee (RACC), UGA, 2010-2011.
33. Member of the Search and Screening Committee for the Dean of the Franklin College of Arts and Sciences, 2011-2012.
34. Member of the Search Advisory Committee for the Director of Research Computing at UGA, 2011-2012.
35. Member of the Franklin College Research Computing Committee (2013-present).
36. Member of the Faculty Affairs Committee, University Council, 2006 – 2008, 2010-2013, Chair 2010-2013.

DEPARTMENTAL SERVICE:

1. Graduate Coordinator, January 1989 – December 1994.
2. Member of the Graduate Programs Committee (Chair 1989-1994), 1989 – present.
3. Member of the Graduate Admissions Committee (Chair 1989-1994), 1989 – present.
4. Member of Tenure Faculty, 1988 – present.
5. Member of the Curriculum Committee, (Chair 2009-2012) 1993 – 2012
6. Member of the Recruiting Committee, 1993 – 95; 1998 – 99 (Chair), 2000 – 2001.
7. Member of the Ph.D. in Computer Science proposal committee, 1987 – 1989.
8. Member of the Search and Screening Committee, 1988 – 1989.
9. Member of the Equipment Committee, 1988 – 1989, 1996 – 2005.
10. Member of the Exams Committee, 1996 – 2006.
11. Undergraduate Group Advisor, 1997 – present.
12. Appointed to the Regular Graduate Faculty (provisional member 1985), (1988 - present).
13. Departmental Mentor for Dr. Khaled Rasheed, 2000 – 2003.
14. Member of the Bylaws committee, 2008-present (Chair, 2009 – 2010).
15. Member of the Accreditation Committee, 2009-present.
16. Member of the Teaching Assignment committee (chair 2013- present), 2012-present.
17. Member of the CS program committee for establishing a Professional MS program: “Computational Science and Data Analytics”, 2012-present.

PUBLIC SERVICE:

- Clarke County Mentor Program, 1993 – 1995.