**Curriculum Vitae**

**Personal Information**

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| **Name:** | Maha Alammari |
| **Nationality:** | Saudi |
| **E-mail:** | malammari@ksu.edu.sa |
| **Office Phone Number:** | 00966118055493 |

**Profile Overview**

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| * Self-motivated, hardworking and goal-oriented with flexibility.
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| * Adaptable to the new environment, devoted, honest, determined and cooperative
 |
| * Understanding of education/ administration with quantitative and conceptual abilities; insights and team approach to drive organizational improvements and implementation of the best practices
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**Credentials**

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| * PhD: Doctor of Philosophy in Applied Numerical Computing, The University of Manchester, Manchester, United Kingdom, 2011
 |
| * MSc: Master of Science in Mathematics-Functional Analysis, King Saud University, Riyadh, Saudi Arabia with grade 4.94 out of 5, 2006
 |
| * BSc : Bachelor of Science in Mathematics, King Saud University, Riyadh, Saudi Arabia with an Excellent grade 4.99 out of 5 and  first class honor, 2003
 |
| * High School: Al-Abnaa’  School, Riyadh, Saudi Arabia with an excellent grade 99.9 %, 1999
 |
| * Languages: Arabic and English
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**Professional Experience**

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| * Member of a committee for creating a qualitative bachelor's degree program in one branch of Mathematics, October 2023.
 |
| * Member of the development and modernization committee in the department of mathematics, King Saud University, January 2023.
 |
| * Vice Supervisor of Statistics and Information Department at King Saud University, Riyadh, Saudi Arabia, January 2018-2021
 |
| * Vice Head of Mathematics Department at King Saud University, Riyadh, Saudi Arabia, September 2015-September 2017

(The Department got the National Academic Accreditation in 2016 and renewed the International Academic Accreditation from ASIIN in 2017) |
| * Assistant Professor of Applied Mathematics at King Saud University, Riyadh, Saudi Arabia, 2011-Now
 |
| * Member of the Board of Directors for the Saudi Society for Mathematical Sciences, May 2017-2020
 |
| * Member of a standing committee in the Scientific Council at KSU concerning retirees' requests to continue working at the university by yearly contracts, King Saud University, 2017-Now
 |
| * Member of the training opportunities committee targeting the labor market in the university city for female students, 2018-2019
 |
| * Member of the Organizing Committee for the 4th "Teaching and Learning Mathematics in General Education- Distinct research and experiences" Conference, King Saud University, Riyadh 21-23 / 10/2014
 |
| * Assistant trainer at Mawhiba, Summer Camp, Riyadh, Saudi Arabia, 2011
 |
| * Member in the Examinations committee at Mathematics Department in the College of Science, King Saud University, Riyadh Saudi Arabia, 2011
 |
| * Demonstrator at Mathematics Department in The University of Manchester, 2009-2010
 |
| * Demonstrator at Mathematics Department in the College of Science, King Saud University, Riyadh, Saudi Arabia, 2004-2008
 |

**Research**

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| **Published Papers*** Non-uniform heat source or sink on the radiated and thermophoretic flow of slender body of paraboloid and cone revolutions in a saturated medium with Brownian motion. Huda Alsaud and Maha Alammari . Modern Physics Letters B.

<https://doi.org/10.1142/S0217984924501811>, January 2024.* Exploring optical soliton solutions of a self-focusing nonlinear Schrödinger equation by two effective techniques. Shafiq Ahmad, Maha Alammari, Aman Ullah, Shabir Ahmad, Sayed Saifullah and Naila Nasreen. Optical and Quantum Electronics**,** 56: 339 (2024). <https://doi.org/10.1007/s11082-023-05936-w>, December 2023.
* Numerical framework of magnetized thermal Casson nanoliquid flow with time-dependent stretching channel enclosing chemical reaction effect and variable fluid properties: A Particle Swarm Optimization with stability. Maha Alammari. Modern Physics Letters B. <https://doi.org/10.1142/S0217984924501094>, December 2023.
* Designing pair of nonlinear components of a block cipher over quaternion integers. Muhammad Sajjad, Tariq Shah, Huda Alsaud and Maha Alammari. AIMS Mathematics, 8(9): 21089–21105. DOI: 10.3934/math.20231074, July 2023.
* Construction and Decoding of BCH-Codes Over the Gaussian Field.

Muhammad Sajjad, Tariq Shah, Maha Alammari, and Huda Alsaud.IEEE Access. DOI: 10.1109/ACCESS.2023.3293007, July 2023.* A novel mathematical model for the effects of wall properties on pumping flow of a biofluid in a symmetrical three-dimensional curved duct, Frontiers, Frontiers in Physics., (2023).
* Natural Bio-Convective Flow of Maxwell Nanofluid over an Exponentially Stretching Surface with Slip Effect and Convective Boundary Condition, Scientific Reports, (2022)12:2220.
* Hermitian matrix polynomials with real eigenvalues of defiinite type-part I:  Classification. Linear Algebra Appl., 436 (2012), 3954-3973.
* Standard Triples of Structured Matrix Polynomials. Linear Algebra Appl., 437 (2012), 817-834.
 |
| **Theses*** Analysis of Structured Polynomial Eigenvalue Problems, Ph.D. Thesis, The University of Manchester, August 2011.
* Products of Bergman Space Toeplitz Operators and Brown-Halmos Type Theorems, M.Sc. Thesis, King Saud University, June 2006.
 |
| **Scientific Refereeing*** Participating as a referee at The First Cultural Scientific Concourse for the Girl Students from Universities and Institutes of Higher Education in the GCC, 20 January 2015, Riyadh, Saudi Arabia.
* Refereed for Arab Journal of Mathematical Sciences (AJMS), 2014.
* Refereed for Linear Algebra and its Applications Journal (LAA), 2013.
* Participating as a referee at National Olympiad for Scientific Creativity on 19/3/2012, Riyadh, Saudi Arabia.
* Refereed for IMA Journal of Numerical Analysis and SIAM Journal on Matrix Analysis and applications, 2011.
* Participating as a referee at National Olympiad for Scientific Creativity on 19/3/2012, Riyadh, Saudi Arabia.
 |
| **Talks at Conferences*** Scientific Forum Week, 17 April 2018, King Saud University, Saudi Arabia. "Saudi Association of Mathematical Sciences"
* SIAM Conference on Applied Linear Algebra, 18-22 June 2012, Universitat Politecnica De Valencia, Spain. "Standard Triples of Structured Matrix Polynomials"
* ILAS conference, 21-25 June 2010, Pisa Italy. "Classification of Hermitian Matrix Polynomials with Real Eigenvalues"
* 23rd Biennial Conference on Numerical Analysis 23-26 June 2009, Strathclyde University, Glasgow, Scotland "Quasidefinite Matrix Polynomials"
* Young Researchers Workshop on Spectral Theory, Quantum Chaos and Random Matrices, June 29th-July 1st, 2009, Cardiff University, UK. "Hyperbolic Matrix Polynomials"
 |
| **Attended Conferences and Workshops*** The 4th Conference on Mathematical Sciences and Applications, 11-12 April 2018, Riyadh, Saudi Arabia.
* SIAM Conference on Applied Linear Algebra, 26-30 October 2015, Hayatt Regency Atlanta, Atlanta, Georgia, USA.
* The First Cultural Scientific Concourse for the Girl Students from Universities and Institutes of Higher Education in the GCC, 20 January 2015, Riyadh, Saudi Arabia.
* 2012 SIAM Conference on Applied Linear Algebra, 18-22 June 2012, Universitat Politecnica De Valencia, Spain.
* GCF, January 21st-24th 2012, Riyadh, Saudi Arabia.
* MOPNET4, April 27th-March 28th 2011, The University of Manchester, UK.
* The 2nd Manchester SIAM Student Chapter Conference, May 20th, 2011, The University of Manchester, UK (presented poster: Numerical Linear Algebra Group in Manchester).
* The 1st Manchester SIAM Student Chapter Conference, April 62th, 2010, The University of Manchester, UK.
* MOPNET2, March 29th-March 30th 2010, University of Nottingham, UK.
* The 3rd Annual Oxford University SIAM Student Chapter, February 9th, 2010, University of Oxford, UK.
* Mathematics Research Students Conference (MRSC), May 2009, The University of Manchester, UK.
* The 50th British Applied Mathematics Colloquium (BAMC), 31 Mar-3 April 2008, The University of Manchester, UK.
* Workshop on New Directions in Functions of Matrices, May 2008, The University of Manchester, UK.
* Workshop on Structured Matrix Polynomials, 13th November 2007, University of Nottingham, UK.
 |

**Professional Development**

**Courses and Workshops**

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| * Question writing techniques for Administrative and Actuarial Science, Education and Training Evaluation Commission, September 2023, Saudi Arabia.
 |
| * Building standards for designing training briefcases, March 1, 2023, King Saud University, Saudi Arabia
 |
| * Train of the trainers course, February 7-11, 2022, Technical and Vocational Training Corporation, Saudi Arabia
 |
| * Coaching: Exam Preparation Course (for students), Deanship of Skills Development, March 30, 2022, King Saud University
 |
| * Statistical analysis using SPSS, February 4-6, 2020, King Saud University, Saudi Arabia
 |
| * Statistical skills in preparing administrative reports, January 26-28, 2020, King Saud University, Saudi Arabia
 |
| * Scientific Research in Machine Learning, 9 December 2019, King Saud University, Saudi Arabia
 |
| * Scientific Supervision of Postgraduate Students, 12 September 2019, King Saud University, Saudi Arabia
 |
| * Performance-based Assessment program, 26 August, 2019, King Saud University, Saudi Arabia
 |
| * The first panel discussion on future jobs in Saudi Arabia, 15 January, 2019, Riyadh Chamber, Saudi Arabia
 |
| * Developing Standards of Educational Curricula from the Point of View of the Relevant Authorities Workshop, Education Evaluation Commission, , 26 Nov. 2018, Riyadh, Saudi Arabia
 |
| * A day for exploring Math (MATH IN PRACTICE+) Workshop, 20 November 2018, Pearson, Double Tree by Hilton, Riyadh, Saudi Arabia,
 |
| * The 2nd Annual Meeting of the University's Vice Rectorate for Planning and Development entitled (Continuous Improvement), 1 October, 2018, King Saud University
 |
| * Workshop on Authentic Academic Leadership, ACL, , 7-8 March, 2018, Princess Nora Bint Abdulrahman University
 |
| * Workshop on Documentary Awareness: Practical application of confidential documents and specialized documents, 12 March 2018, King Saud University
 |
| * Qualifying Administrative Leaders, 8—10 January 2017, King Saud University, Riyadh, Saudi Arabia
 |
| * Student-Centered Learning, 08 December 2016, King Saud University, Riyadh, Saudi Arabia
 |
| * Intellectual Property Right, 11—12 April 2016, King Saud University
 |
| * Submission of Research Projects, 20 April 2015, General Administration for Research Grants at King Abdulaziz City for Science and Technology
 |
| * Teaching and Learning, 27-31 July 2015, University of South Florida, Tampa, United States of America
 |
| * The Basics of Career Assessment , 17-18 May 2015, King Saud University, Riyadh, Saudi Arabia
 |
| * Effective teaching workshop, December 2012, King Saud University, Riyadh, Saudi Arabia.
 |
| * Safe and Comfortable Learning Context Workshop, November 2012, King Saud University, Riyadh, Saudi Arabia
 |
| * Professional teaching competencies in HE, November 2012, King Saud University, Riyadh, Saudi Arabia.
 |
| * Learning Based Brainstorming, 16-17 September 2012, King Saud University, Riyadh, Saudi Arabia
 |
| * Training Young Students for the Mathematics Olympics, 25-30 August 2012, Mawhiba, Saudi Arabia
 |
| * Viva Survivor Workshop, Faculty of Engineering and Physical Sciences, 21st July 2010, the University of Manchester, UK.
 |
| * Graduate Teaching Assistance (GTA) Workshop, Faculty of Engineering and Physical Sciences, 20th February 2009, The University of Manchester, UK
 |
| * Supporting Postgraduate Students who teach Mathematics and Statistics Workshop. 6th November 2008, The University of Manchester, UK
 |
| * Academic Writing Workshop, Faculty of Engineering and Physical Sciences, 11th February 2008, The University of Manchester, UK
 |

**Memberships**

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| * SIAM-Society of Industrial and Applied Mathematics
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| * ILAS-International Society of Linear Algebra
 |
| * Saudi Association for Mathematical Sciences
 |

**Activities**

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| * Attending "The Higher Education of Girls in The Kingdom" Symposium, 14/1/2013, Riyadh, Saudi Arabia
 |
| * Organizing the 1st Manchester SIAM Student Chapter Conference, April 26th, 2010, Manchester, UK
 |
| * Participating in Saudis around the world radio program, England, 2010
 |
| * Participating in "A returning scholarship student" event  at King Saud University, Riyadh, Saudi Arabia, 2011
 |
| * Participating in organizing the open day at King Saud University,  Riyadh, Saudi Arabia, 2005
 |

**More on General Education**

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| * Attending Foundation and Introductory Piano Courses 2022-2023
 |
| * Attending selected sessions of WEP 2013, KAUST, Thuwal, Saudi Arabia, January 2013
 |
| * Interested in self- development
 |
| * A workshop on virtual classrooms, October 2012, King Saud University
 |
| * A course on  French Language for beginners,  The International Society, The University of Manchester, Manchester, United Kingdom, 2010
 |
| * A course on using smart board and display stand (E-podium) effectively, 18 September 2012, King Saud University
 |
| * Computer courses on Microsoft front page,  Adobe Photoshop and Macromedia flash, New Horizon, Riyadh, Saudi Arabia, 2004
 |
| * English Language Courses, Direct English, Riyadh, Saudi Arabia, 2005
 |
| * A course on Scientific Research,  Research Center, King Saud University, Riyadh, Saudi Arabia, 2005
 |