

Curriculum Vitae

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PERSONAL SUMMARY.

In 1993-1994, I was accepted at Mustansiriyah University / College of Science / Mathematics Department, and then I graduated in 1996-1997 as one of the top ten in the department, which gave me the opportunity to work in the department as an Associate Tutor.

From 2000 to 2002, I worked as an assistant lecturer after receiving a Master's degree in Differential Equations. After that, I began working on my own in that field until I published some interesting papers. This aided me in obtaining a higher scientific qualification in order to advance inside my own field by obtaining the promotion to lecturer.

In 2009, I received a scholarship from the Iraqi government to complete my studies in pure Mathematics - Complex Analysis, which I consider a very good opportunity to study abroad, particularly in European countries such as the United Kingdom, as well as to finance my studies and allow me to fully concentrate on getting your degree rather than worrying about money issues. This opportunity provided me with the best opportunity to learn a language while also increasing the value of my degree and improving my skills in my own research area.

EDUCATION.

- Doctor of Philosophy , Mathematics in Complex Analysis; University of Sussex, United Kingdom; 2009-2013.
- Master of Science, Mathematics, Al-Mustansiriyah University, Baghdad, Iraq; 2000 – 2002.
- Bachelor of Science, Mathematics, Al-Mustansiriyah University, Baghdad, Iraq ; 1993-1997.

ACADEMIC /TEACHING EXPERIENCE.

- I have 20 number of years' teaching experience on Dept. of Maths, Mustansiriyah University, Baghdad, Iraq.
- 2011-2013; Associate tutor for two and a half years in Sussex University, United Kingdom.
- I am also aware of the importance of the pastoral care of students and take the role of tutor very seriously. I am experienced in liaising with colleagues to help students with a variety of problems when I was Chair of the Alumni follow-up Unit in College of Sciences, Al-Mustansiriyah University, also I contributed to improving and qualification of graduate

through preparing some interesting workshop in English language, and some seminars for Graduates and I have tried to get experience teaching at different levels in order to satisfy the aims of the labor market.

COURSES TAUGHT.

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|-----------------------------|---|
| 1- Mathematical Statistics. | 5- Theory of Ordinary Differential Equations. |
| 2- Calculus. | 6- Special Functions |
| 3- Advanced Calculus. | 7- Representation Theory |
| 4- Mathematics Foundation. | 8- Linear Algebra. |

PROFESSIONAL AFFILIATIONS.

- 2020- till now , Scientific Promotions Unit member at the Mustansiriyah University / College of Science.
- 2018-2020; Director of Quality Assurance and Performance Evaluation Division, College of Science, Mustansiriyah university .
- 2015-2016; Mathematics Department Coordinator, College of Science, Mustansiriyah University.
- (June)2014- (June) 2015 Chair of the Alumni follow-up Unit in College of Sciences, Mustansiriyah University.
- Member of the committee of the world University Ranking in College of Science; Mustansiriyah University.
- 2013- (May) 2015; Chair of the Quality assurance committee and the university performance in Department of Mathematics, College of Sciences, Mustansiriyah University.
- 2014-2015; I have been working as an exam committee member , Dept. of Maths, Mustansiriyah University.
- 2011-2013; Associate tutor for two and a half years in Sussex University , United Kingdom.
- 2004-2009; I have been working as an exam committee member for 5 years.
- 1997- till now; Lecturer in Dept. of Maths, Mustansiriyah University, Baghdad, Iraq.

Reviewer and Editor Board member for several

- 1- WSEAS transactions on mathematics.
- 2- Journal of Function Spaces (Hindawi)
- 3- International journal of materials science and applications.
- 4- Mathematics and Statistics.
- 5- International Journal of Multidisciplinary Science and Advanced Technology.

PUBLICATIONS.

1. Shatha S. Sejad, M.K.Jasim, "**On Lie's Reduction Theorem with an Application to Isentropic Fluid Spheres**", Journal of Al-Nahrain University , Vol. 9, No. 1, June,2006, pp. 80-84.
2. Shatha S. Sejad, " **Full- Order Observer Design For Non-Linear Dynamic Control System**", Journal of Al-Nahrain University, Vol. 10, No. 2,December, 2007, pp.154-161.
3. Shatha S.Sejad, "**Invariante And Reduction of the Class $y'' = F(x)y^n$, (n not equal to zero), Under Stretching Groups**", Journal of Al-Nahrain University, Vol.11, No.1, April 2008, pp. 90-93.
4. Shatha S.Sejad and Radhi A.Zboon, " **Lyapunov Function Approach for Stablizability a class of nonlinear Dynamical Control System**", Al- Mustansiriyah J. Sci, Vol.19, No2, 2008.
5. Shatha, Alhily, 2013. **Higher Integrability of the Gradient of Conformal Maps**. Ph.D. Dissertation, University of Sussex
6. Shatha S.Alhily , "**Some results on univalent function**", Journal of Mathematical Theory and Modelling;4(No.11,(2014)), 59-67, 2014.
7. Shatha S.Alhily, " **Integrability under an inner boundary complex domain** " , Int J of Advanced research, Vol 3, Issue 11, 287-293. (2015).
8. Shatha S. Alhily, "**On the Square Mean of Growth of the Solution of Complex Differential Equations**"; Australian Journal of Basic and Applied Sciences, Vol.10 ,No.13, August 2016, pp.131-136.
9. Shatha S. Alhily, "**On Partial Sums of Regular Functions**"; Al - Mustansiriyah Journal of Science, Vol. 27 ,No. 2, August 2016, pp.131-136.
10. Shatha S.Alhily, "**A new Proof of Hardy's Identity**", International Journal of Sciences: Basic and Applied Research (IJSBAR) Vol. 34, No. 1, (2017), pp 276-285.
11. Shatha S. Alhily, "**Weighted composition operator on convexity of Bergman spaces**", Mathematics and Statistics Journal, Vol. 3, No.2,(April 2017) ,pp. 25-28.
12. Shatha S. Alhily, "**Close-to-convex Function Generates Remarkable Solution of 2ndorder Complex Nonlinear Differential Equations**, Journal of Qadisiyah Computer Science and Mathematics, Vol.9,No.2, (2017).
13. Shatha S. Alhily, "**Some Results on Koebe one- Quarter Theorem and Koebe Distortion Theorem**", Special issue of the first international scientific conference of Iraqi Al-Khawarizmi Society (JIKhS) ,Vol. 2, (2018).
14. Shatha S. Alhily and Deepmala, "**Boundary Behaviour of Holomorphic Functions on the Cardioid Domain with some Applications**", J. Bol. Soc. Paran. Mat. (3s.) Vol. 38,Issue. 7, pp: 203-218, (2020).
15. Shatha S. Alhily, and Vishnu Narayan Mishra, "**Application on the Boundary Behaviour of the Derivative of conformal mapping** ",International Journal of Analysis and Applications. Vol.19, No. 5, 2021.
16. Haneen Abbas Saleh and Shatha S.Alhily, "**Growth and Bounded Solution of second-order of Complex Differential Equations through of Coefficient Function**", *IOP Conference Series: Materials Science and Engineering*, Vol. 871, No.1, 2020.
17. Sabah S. Al-Azawee and Shatha S.Alhily, "**Some Geometric Properties for Hyperbolic Univalent Function**, Iraqi Journal of Science, Vol. 62 ,No.6 , 2021.
18. Haneen Abbas Saleh and Shatha S.Alhily, "**The effect of the Coefficient Function on the Solution Behavior for the Second-Order Complex Differential Equation**, Iraqi Journal of Science, Vol.63 ,No.4 , 2022.

19. Sabah S. Al-Azawee and Shatha S. Alhily, **Some Invariant Differential Operator Properties for Hyperbolic Univalent Convex Functions**, J. Interdisciplinary Mathematics Journal of Interdisciplinary Mathematics. Vol.25, No.8,2022.
20. Bassim kareem Mihsin , Waggas Galib Atshan, Shatha S. Alhily, **New results on fourth-order Hankel determinants for convex functions related to the sine function**. International Journal of Nonlinear Analysis and Applications. Vol. 12, Special Issue, Winter and Spring, January 2021.
21. Bassim kareem Mihsin , Waggas Galib Atshan, Shatha S. Alhily and Alina Alb Lupas. **New Results on Fourth-Order Differential Subordination and Superordination for Univalent Analytic Functions Involving a Linear Operator**. Symmetry J. Vol.14, No.2, 5 February 2022.
22. Bassim kareem Mihsin , Waggas Galib Atshan, Shatha S. Alhily. **On New Sandwich Results of Univalent Functions Defined by a Linear Operator**. Iraqi journal of science. Vol.63, No.12.2022.
23. Fatima AH. Mazloun and Shatha S. Alhily. **Omitted - value transformation for a Complex Differential Equations**. Al-Qadisiyah Journal of Pure Science. Vol.28.No.1. 2023.
24. Fatima AH. Mazloun and Shatha S. Alhily . **Some Transformation Properties with Omitted Value**. Iraqi Journal of Science. Vol.64.No.7.2023.
25. Shatha S. Alhily , **Some Geometric Properties of Close- to- Convex Functions**. Iraqi Journal of Science. **Accepted Date : 19-8-2023**.
26. Shatha S. Alhily and Alina Alb Lupas . **Certain Class of Close to Convex Univalent Functions**. **Symmetry Journal. Vol. 15. No.9 (1789).2023**.
27. Amal Khalaf Haydar, Radhi A. Zaboony and Shatha S. Alhily . **Exact Solutions of Nonlinear Complex Partial Differential Equations via Two- Dimensional Differential Transform Method**. Mathematics for Applications Journal. **Vol.12, No.2, 2023**.
28. Amal Khalaf Haydar, Radhi A. Zaboony and Shatha S. Alhily. **Solving Higher Orders Linear Complex Partial Differential Equations via Two – Dimensional Differential Transform Method**. Journal of University of Anbar of Pure Science .**Vol.18, No.1, 2024**.
29. Shatha S. Alhily and Alina Alb Lupas, **Sandwich Theorems Involving Fractional Integrals Applied to the q-Analogue of the Multiplier Transformation**. AIMS Mathematics, Vol.9 , No.3. 2024.
30. Shatha S. Alhily, **Some Geometric Properties of Close- to- Convex Functions**, Iraqi Journal of Science .Vol.65No. 9, 2024.
31. Amal Khalaf Haydar, Radhi A. Zaboony and Shatha S. Alhily. **Solving Higher Order Non-Homogenous Complex Partial Differential Equations via Two – Dimensional Differential Transform Method**. Journal of Interdisciplinary Mathematics , Acceptance Date : 29/02/ 2024.

PROFESSIONAL DEVELOPMENT.

1. 22nd International Conference on Natural and Applied Sciences. 24-25/01/2024 , Dubai
2. The Participation in the 2022 National Resident General Training Course, which organized in the Ministry of Higher Education and Scientific Research, Apparatus of Supervision and Scientific Evaluation, Directorate of Quality Assurance and Academic Accreditation, Department of Quality Assurance.
3. Second International Conference of Mathematical Sciences , 31 July- 6 August (2018). Istanbul, Turkey.
4. First International Conference of AI - Khwarizmi Association, 28-29 March 2018.
5. The 23rd Specialized Scientific Conference of Mathematics and Computer Departments, 30 April 2017.
6. The valuable contribution at the symposium entitled "ARAB RESEARCHER ID (ARID)", AL-Mustansiriyah University, 11th April 2017.
7. (CIMPA) and the Embassy of France, Salahaddin University Kurdistan-Iraq on (Iterative Methods for Solving the Boundary's Data Reconstruction Problems), 18–29 December 2016.
8. 17th International Conference on Applied Mechanics and Mathematics (ICAMM), Paris, France, 2015
9. The International Center of Pure and Applied Mathematics (CIMPA) and the Embassy of France, Salahaddin University Kurdistan-Iraq on "Inverse problems: Theory and applications" from 4th to 15th May 2014.
10. I have got full workshop on How to improve your teaching skills when I started teaching in Sussex University, United Kingdom, 2001.
11. I have done couple courses in English Language , even I have achieved top marks in, to achieve the requirements of academic study in England.
12. The South West PDEs Winter School Conference, in Jan 2012 at Warwick University ,UK.
13. London Mathematics Society in United Kingdom (UK) Women in Mathematics Workshop (May) 2011, present poster.
14. The Sixth Jordanian International Congress of Mathematics (SJICM), Irbid -Jordan, December, 2004.
15. The First National Conference of Mathematics, Baghdad, Iraq, 2001.

A condition for the univalence of analytic functions defined by the differential operator $U_{\gamma_1, 2, \lambda, h, a, \gamma, x, k} \phi(r): B \rightarrow N$ is found, which is related to the Hadamard product involving the Srivastava-Attiya operator $T_{a, \gamma}$ and the Generalized Ruscheweyh operator T_{γ_1, γ_2} .