

# Shayea Aldossari

**Address:**

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## Summary:

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Assistant Professor of Mathematics, Department of Mathematics, College of Science, King Saud University.

## Qualifications:

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- Ph.D in Mathematics Florida State University, Florida, USA  
2020
- Master of Science in Mathematics Florida State University, Florida, USA  
2018
- Master of Science in Mathematics Mississippi State University, Mississippi, USA  
2014
- Bachelor of Science in Mathematics King Saud University, Riyadh, KSA  
2010

## Working Experience:

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- 2010 Teaching Assistant, Prince Sattam Bin Abdulaziz University, Saudi Arabia
- 2010 - 2020 Teaching Assistant, King Saud University, Saudi Arabia
- 2011 - 2020 Scholarship for higher studies in the U.S.A.
- 2018 - 2020 Research Assistant, Mathematics Department, Florida State University, USA
- 2020 - Now Assistant Professor of Mathematics, College of Sciences, King Saud University.

## Publications:

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- Aldossari, Shayea, and Mark van Hoeij. "Methods for simplifying differential equations." *ACM Communications in Computer Algebra* 53.3 (2019): 93-95.
- Aldossari, Shayea. *Algorithms for Simplifying Differential Equations*. Diss. The Florida State University, 2020.
- Aldossari, S. (2023). Computing pullback function of second order differential operators by using their semi-invariants. *Journal of Symbolic Computation*, 119, 38-49.

- Aldossari, S. Solving second-order differential equations in terms of confluent Heun's functions, *Math. Meth. Appl. Sci.* (2024), 1–13, DOI 10.1002/mma.10001.
- Aldossari, S. Solving second order homogeneous differential equations in terms of Heun's general function, *Journal of Symbolic Computation*.(2024)
- Aldossari, S. Solving Second-Order Homogeneous Linear Differential Equations in Terms of the Tri-Confluent Heun's Function. *Symmetry*2024,16,678. [https:// doi.org/10.3390/sym16060678](https://doi.org/10.3390/sym16060678)

## **Memberships:**

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- Saudi Association for Mathematical Sciences

## **Conferences:**

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- ISSAC 2019, The International Symposium on Symbolic and Algebraic Computation, Beijing, China.
- DART 2020, Differential Algebra and Related Topics, City University of New York, USA
- CMSA 2021, 5th Conference on Mathematical Science and Applications, (Virtual).

## **Administrative Committees:**

- Coordinator of Study Plans Committee, KSU
- Member of Computing Mathematics Committee, KSU
- Member of Teaching Assistants and Outstanding Students Committee, KSU
- Member of Study Plans and Programs Committee of the College of Science, KSU (2021-2023)