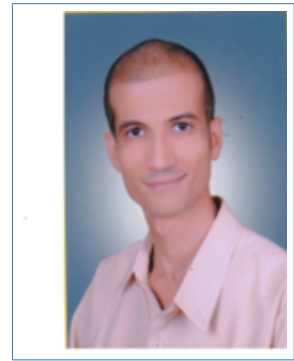


Hareth Mohamed Refat

Curriculum Vitae



Personal Data

Full Name **Hareth Mohamed Refat Abd ElSalam**

Nationality Egyptian

Address Mathematics Department, Faculty of Science, Sohag University, Sohag, Egypt

Date of Birth 8 Nov. 1991

Mobiles +201145379769

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major specialization **Numerical Analysis**

Current position **Lecturer Assistant**

Homepage [Please Click Here](#)

Scopus [Please Click Here](#)

Google Scholar [Please Click Here](#)

Research Gate [Please Click Here](#)

YouTube Chanel [Please Click Here](#)

Linked [Please Click Here](#)

Research Interest

Spectral and Pseudospectral Methods for Solving Differential Equations and class of Optimal Control Problems, Integration Matrices and Gegenbauer polynomial Methods.

Scopus Information's

Scopus ID	No. of articles in Scopus	Citations in Scopus	h-index in Scopus
57200526762	3	14	2

Work Experience

- 2020 to date Lecture Assistant at Mathematics Department, Faculty of Science, Sohag University, Sohag, Egypt.
- 2013 - 2020 Demonstrator at Mathematics Department, Faculty of Science, Sohag University, Sohag, Egypt.

Teaching (Undergraduate Courses)

Calculus I,II, Algebra, Analytic Geometry, Ordinary Differential Equations and Partial Differential Equations, Numerical Analysis.

Education

- 2022 to date **Master Degree of Science in Mathematical** , Mathematics Department, Sohag University, Sohag, Egypt
- 2014 - 2015 **Pre-Master Degree Diploma in Mathematics** , Mathematics Department, Sohag University, Sohag, Egypt
- 2008 - 2012 **Bachelor's Degree of Science (Major: Mathematics, Excellent with honor degree,** Sohag University, Sohag, Egypt

Master Thesis

- Title *Pseudospectral Integration Methods and Adaptive Spectral Element Integration Methods for Solving Differential Equations of Lane-Emden and Singular Perturbation Types.*
- Supervisors Prof. Taha Morsi Elgindy, Ass.Prof. Kareem Taha Elgindy, and Dr. Elsayed Elsanousy Hussein.

Publications

1. Kareem T. Elgindy and Hareth M. Refat. "High-order shifted Gegenbauer integral pseudo-spectral method for solving differential equations of Lane Emden type". Applied Numerical Mathematics, Elsevier, 128, pp. 98–124. DOI:10.1016/j.apnum.2018.01.018
2. Kareem T. Elgindy and Hareth M. Refat. "High-order Gegenbauer integral spectral element method integrated with an adaptive Chebyshev optimization strategy for solving linear singularly perturbed differential equations". Journal of Computational and Applied Mathematics, Elsevier, 372, pp. 112722. DOI: 10.1016/j.cam.2020.112722
3. Kareem T. Elgindy and Hareth M. Refat , "A direct integral pseudospectral method for solving a class of infinite-horizon optimal control problems using Gegenbauer polynomials and certain parametric maps". AIMS Mathematics, 8(2), pp. 3561–3605. 202

Languages

Arabic Native
English Good

Computer Skills

Intermediate Fortran
Expert Latex, Maple, Matlab and Mathematica.
Miscellaneous Miscellaneous Windows and MS.Office

Social skills

Excellent