Academic Curriculum Vitae



Personal Information:

Full Name: Karzan Ahmed Berdawood

Academic Title: Lecturer

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Education:

- ❖ 2022 Awarded PhD in Mathematics (<u>Inverse Problem</u>), Department of Mathematics, College of Science, Salahaddin University/ Erbil, Iraq and Nantes Université, Département Mathématiques, Laboratoire de Mathématiques Jean Leray, Nantes, France.
 - ➤ **Ph.D. Thesis**: New iterative methods for solving Cauchy problems governed by Helmholtz-type equations.
- ❖ 2015 Awarded M.Sc. in Mathematics (<u>Numerical Analysis</u>), Department of Mathematics, College of Science, Salahaddin University/ Erbil, Iraq.
 - M.Sc. Thesis: Computational Methods for Solving Two-Dimensional Linear Volterra-Fredholm Integral Equations of the Second Kind.
- ❖ 2005-2006 Awarded B.Sc. in Mathematics, Department of Mathematics, College of Science Salahaddin University/ Erbil, Iraq
- * 2001-2002 Awarded High School, Hmrin Secondary School, Zraha Street, Erbil, Iraq.

Employment:

- ❖ 2007-2008: Accountant in Oskar Company.
- ❖ 2008 to 2015: Assistant researcher in Mathematics Department, College of Science, Salahaddin University/ Erbil, Iraq.
- ❖ 2015 to date: Assistant Lecturer in Department of Mathematics, College of Science, Salahaddin University/ Erbil, Iraq.
- ❖ 2014-2015: Mathematics teacher in National Technical Institute Erbil (as a lecturer).

2015-2016: Mathematics teacher in Noble Private Institute (as a lecturer).

Qualifications

Language Skills:

Kurdish: Native
Arabic: Excellent
English: Very Good
French: good

Computer Skills:

- Microsoft Office (Word, Excel and Power Point)
- Windows System
- Adobe Photoshop
- Latex
- Web Programming Design by HTML:
- Maple Programming Language
- Matlab Programming Language
- Python Programming Language
- FreeFem++ Programming Language
- C++ Programming Language

Teaching experience:

Some of the subjects that I taught:

- Numerical Analysis
- Ordinary Differential Equations
- Partial Differential Equations
- Operation Research and Optimization
- Programming Language (MATLAB and MAPLE).
- Discrete Mathematics
- Advanced Calculus and Calculus
- Linear Algebra

Research and publications

- Rostam K. Saeed and <u>Karzan A. Berdawood</u>, Solving Two-dimensional Linear VolterraFredholm Integral Equations of the Second Kind by Using Successive Approximation Method and Method of Successive Substitutions, *Zanko journal of pure and applied Sciences*, Vol.XX, No.XX, (2015).
- Rostam K. Saeed and <u>Karzan A. Berdawood</u> (2015), Solving Two-dimensional Linear VolterraFredholm Integral Equations of the Second Kind by Using Series Solution Methods, *Journal of Zankoy Sulaimani Part A (JZS-A)*, Vol.17, No.4.
- <u>Karzan A. Berdawood</u>, Abdeljalil Nachaoui, Rostam Saeed, Mourad Nachaoui and Fatima Aboud (2020), An alternating procedure with dynamic relaxation for Cauchy problems governed by the modified Helmholtz equation, *Advanced Mathematical Models* \& *Applications*, Vol.5, No.1,pp. 131-139.

- <u>Karzan A. Berdawood</u>, Abdeljalil Nachaoui, Mourad Nachaoui and Fatima Aboud (2021), An effective relaxed alternating procedure for Cauchy problem connected with Helmholtz Equation, *Numerical Methods for Partial Differential Equations*, doi:10.3934/dedss.2021013.
- <u>Karzan Berdawood</u>, Abdeljalil Nachaoui, Rostam Saeed, Mourad Nachaoui and Fatima Aboud (2021), An efficient DN alternating algorithm for solving an inverse problem for Helmholtz equation, Discrete & Continuous Dynamical Systems-S, doi:10.1002/num.22793.
- <u>Karzan A. Berdawood</u>, Abdeljalil Nachaoui and Mourad Nachaoui, (2023), An accelerated alternating iterative algorithm for data completion problems connected with Helmholtz equation, *Statistics*, *Optimization & Information Computing*, Vol.11, No.1,pp.2-21.

Conferences and courses attended

- **14th-18th November, 2009**: The First Iraqi-French Mathematics Conference in College of Science, Salahaddin University-Erbil, Iraq.
- **5**th-**14**th **May, 2014:** CIMPA-KURDISTAN-IRAQ Research School, "Inverse Problem: Theory and Applications".
- **18**th-**29**th **December, 2016:** Member of West Asia Mathematical Schools (WAMS)-CIMPA" Iterative Method for Solving the Boundary's Data Reconstruction Problems".
- 12th-17th March, 2017: Member of Member of West Asia Mathematical Schools in Erbil. "Topics in Algebraic Number Theory and Diophantine Approximation".
- Start in 22 October to 2 November 2017: member in West Asia Mathematical Schools WAMS 2017, "Control and Optimization with Industrial Applications".
- 11th-12th February, 2018: National Conference on Pure and Applied Mathematics and Mathematics Education.
- 29thApril-3^{rh} May, 2018 Some Basic Mathematics in Cryptographic Protocols (WAMS)-CIMPA.
- **27th October -3rd November, 2019, Nesin Mathematics Village-Izmir-Turkey,** West Asia Mathematical School (WAMS): Mathematics and their interactions.
- 1st-2nd June, 2020, Khouriba: International Conference on Mathematics and Data Science (ICMDS 2020).
- 22th-24th February, 2021, Khouriba, Morocco: Numerical Analysis and Optimization Days.
- 31th October-4th November, 2021, Yarmouk University-Irbid-Jordan: West Asia Mathematical School (WAMS): Mathematical Methods in Biological and Related Sciences, Mathematical Methods in Biological and Related Sciences.
- **23**th-**28**th **August, 2022, College of Science, Salahaddin University-Erbil, Erbil, Iraq :** Topics in Algebraic Number Theory (WAMS School 2022).
- **29**th-**31**th **August, 2022, College of Science, Salahaddin University-Erbil, Erbil, Iraq:** The Third International Conference of Mathematics and its Applications (TICMA2022).
- **7th-10th May, 2023** I was a section chair for the ICOWOBAS2023 conference at Tishk International, Erbil, Iraq.