Curriculum Vitae(C.V)

#### **Personal Information:**

Name: Hasan Idais Status: Married Gender: Male

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# **Academic Qualifications:-**

- 2016-2019. PhD Applied Mathematics, Department of Mathematics—University of Granada, Granada-Spain.
- 2010-2012. M.Sc of Computational Mathematics, Al-Najah National University, Palestine.
- 2006-2010. **B.Sc of Mathematics**, Al-Najah National University, Palestine
- 2006: General Examination Board, Scientific branch.

### **Teaching:-**

- Statistic, Numerical analysis, Math of management at Al- Quds open university (academic year 2013/14).
- Statistic with R programming, Calculus I, Differential Equations with Matlab and Applied mathematics, Granada University (academic year 2015/16).
- Stochastic Modeling and Calculus II, Granada University (spring 2016/17)
- Liner Algebra and Numerical Analysis ,Biostatistics , Granada University ,Granada University (fall 2017/18).
- Engineering mathematics, Biostatistics, Business statistics, Arab American University (Spring 2018/19)
- Business statistics, advance statistics, Calculus 1, Arab American University (fall 2019/20)
- Biostatistics, Business statistics, Numerical Analysis, Engineering mathematics, Arab American University (summer 2019/20)
- Biostatistics for dental student, Mathematics in management, Engineering mathematics I Business statistics basic Math, Arab American University (summer 2020/21)
- Business statistics, basic Math, Arab American University (fall 2020/21)
- Mathematics for medical student, mathematics for information technology, Calculus (I), Arab American University (fall 2021/22)

- Discreet mathematics, mathematics for information technology, calculus I, biostatistics, Arab American University (spring 2021/22).
- Biostatistics for Medicine, student ,Business mathematics , basic mathematics, Arab American University (summer 2022)
- -Advance statistics for PhD student, Business mathematics, Business statistics, Math for IT, Calculus 1, Arab American University (Fall 2022/23).
- Business statistics for master student, Business mathematics, Business statistics, Math for GIS student, Calculus 1, Biostatistics for dental student Arab American University (spring 2022/23).
- Business statistics, Biostatistics, Arab American University (summer 2022/23).
- Business statistics, Biostatistics, Discrete mathematics, Biostatistics for dental student, Calculus I, Calculus II, Arab American University (fall 2022/23).
- -Advance statistics for PhD student, Business mathematics, Business statistics, Math for IT, Calculus II, Arab American University (Spring 2023/24).

### Field of Research Interest:

#### **Mathematics**

- Modeling and Simulation
- Approximation theory
- Partial Differential Equations
- Integral Equations
- Physical, Medical and engineering applications

### **Statistics**

- Statistics and operation research.
- Statistical analysis and similarity measure in simulation result.
- Data analysis in nursing, medicines and business researches.
- · Educational technique in open and distance learning

### **Publications:**

- 1) Evolutionary computation of optimal knots allocation in smoothing splines of two variables, International Journal of Computational Intelligence Systems, Vol. 11(2018) 1294 -1306). **published**
- 2) The interpolation error of fuzzy data in 3D using similarity measures of fuzzy numbers, Journal of Mathematical Chemistry, 57, 1252-1267 (2019). **published**
- **3)** Optimal knots allocation in the bicubic spline interpolation problem, Journal of Mathematics and Computers in Simulation- Elsevier, Vol, 164 (2019) 131 145). **Published**
- 4) 3D fuzzy data approximation by fuzzy smoothing bicubic splines, Mathematics and Computers in Simulation- Elsevier 164, 94-102 (2019).**published**
- **5**) Optimal centers allocation in smoothing and interpolating radial basis functions, Mathematics 2021, MPDI. **Published**
- **6)** Approximation of 3D trapezoidal fuzzy data using RBFs, Fuzzy Set and System- Elsevier, 11 May 2022. **Published**
- **7)** A fuzzy linear Programing Model for Octagonal Fuzzy Number, Computational Mathematics and Modeling- Springer. **15 Jun 2024- Under Review**

## **Master's Thesis (Supervisor)**

- Forward-backward finite difference methods for solving the two-dimensional wave equation.
- Finite deference method solution structure for two dimensional heat equation

### **Master's Thesis (Examiner)**

- 1) Method for solving Fully Fuzzy Multi-objective linear programming problem
- 2) Solving Tow-Dimensional Fredholm Integral Equations Using Radial Basis Functions
- 3) Methods for solving some types of fully fuzzy non linear programming problems

### **Recent and future Research:**

- 1) Study a new methodology for optimal placement of random centers, for approximating or fitting a curve or surface to data, using radial basis functions of one or several variables.
- 2) We will continue studying the approximation and interpolation problems using several types of radial basis functions.
- 3)The consideration of more general interpolation problems when the knots are different from the interpolation points.
- 4)Study of the well-posedness of this general problem using some kind of Schoenberg's condition.

### **Conferences:**

- 1) The 7th international conference on approximation methods and numerical modeling in environment and natural resources, (mamern vii 2017),OUJDA-MOROCO,18 May 2017, approximation by fuzzy smoothing cubic splines.
- 2) The 7th international conference on approximation methods and numerical modeling in environment and natural resources, (mamern vii 2017), OUJDA- MOROCO, 19 May 2017, bicubic spline interpolation.
- 3) The 2nd CfP, CMMSE 2018, 9-13 July 2018, Cadiz, Spain, Approximation of fuzzy data by interpolation error using similarity measures.
- 4) The 6th Annual Symposium on Education and New Learning Methodologies Efficient Ecosystems for Industry-Based Learning Models, September 8, 2018, An-Najah University, Nablus, Palestine.
- 5) The Sixth Palestinian conference on Modern Trends in Mathematics and Physics, Palestine Technical University-kadoorie, October 7,2018.
- 6)Symposium on Simulation Technology-based Sciences and Engineering, Ramallah-Palestine,7-9 March 2019, Dose Selection Using Utility Index to Evaluate Risk-Benefit of Several Doses.
- 7) The Second season of the exploratory course of the STEM program, Palestine Technical University-kadoorie, August 11, 2021.
- 8) Data Science and statistical analysis, Palestine Technical University-kadoorie, November 29, 2021.

### Skills:

- Computer skills, Matlab, Python, R- Program, Minitab, SPSS, Word, Excel, Power Point, Internet Explorer, Latex.
- Work through e-learning using the zoom and model program.
- Strong communications and interpersonal skills.
- Ability to work in teams and independently.
- Self-disciplined with good time-management skills.

### Languages:-

- 1- Arabic language: mother language, excellent in reading, writing, conversation.
- 2- English Language: Excellent in reading, writing and Good in Conversation.
- 3- Spanish language: good in reading, writing and conversation.

### **References:-**

- Dr. Nouar Qutob, Dean Faculty of graduate studies, Arab American University Tel.- 0562000202, Email, nouar.qutob@aaup.edu
- Dr. Iyad Suwan, Department of mathematics and statistics, Arab American University Tel.- 0597480308, Email, iyad.suwan@aaup.edu