السيرة الذاتية

الاسم : عدنان هاشم عبد الواحد

الشهادة:

- 1. دكتوراه رياضيات (الجبر) من (University of Iowa) 2016
 - 2. ماجستير رياضيات من (University of Iowa) 2014
 - ماجستير رياضيات من (الجامعة المستنصرية) 2005
 - باكلوريوس رياضيات من (جامعة ذي قار) 2002

الوظائف الحاصل عليها:

الاهتمامات البحثية:

Hopf Algebras in Category Theory, Comodules and Corings, Representation Theory of Quivers, Quantum Groups, Tensor categories,

Topological Quantum Field Theory

البحوث المنشورة:

(i) Generators for Comonoids and Universal Constructions. (with Miodrag C Iovanov). Arch. Math. 106 (2016), 21-{33, c 2015

Springer International Publishing, published online December 11, 2015, DOI 10.1007/s00013-015-0826-6.

(ii) A Universal Investigation of n-representations of n-quivers. CGASA. Volume 10, Pages: 69-106. 2019. Available Online from

11 June 2018, http://cgasa.sbu.ac.ir/article 63576 0983b5b4e41e9dd09495405051ee1ca3.pdf.

(iii) Ln-Proper Functions. Journal of Thi-Qar Science 2(1), pp. 79-87, 2010.

(iv) Basic Concepts on Ln-Connectedness. Journal of University of Thi-Qar 5(2), pp. 2-11, 2009.

البحوث المقدمة للنشر:

Cofree Objects in The Centralizer and The Center Categories (2016). Preprint available at ArXiv.org: math.CT/1603.02386.

http://arxiv.org/pdf/1603.02386v4.pdf.

البحوث اللتي لا تزال قيد العمل:

Varieties associated to Linear Operators.

(ii) Pascal Ideals

(iii) Stanley-Reisner Hopf Algebras.

(iv) Universal Constructions and Generators for Coalgebras in The Categories of Yetter-Drinfeld Modules of The First and The

Second Types.

_ تقييم البحوث:

zbMATH (Zentralblatt MATH) Reviewer

الحلقات الدراسية:

_ Conference Talks

(1) Cofree Objects in The Centralizer and The Center Categories. Graduate Student Conference in Algebra, Geometry, and Topology. (The Second Annual). Temple University. Philadelphia, PA USA. May 15, 2016.

(2) Generators for Comonoids and Universal Constructions (with Miodrag C Iovanov). AMS Sectional Meetings, Fall Western

Sectional Meeting, California State University, Fullerton, Fullerton, CA, October 24-25, 2015 (Saturday - Sunday), Meeting #

1114.

(3) Generators for Comonoids and Universal Constructions (with Miodrag C Iovanov). AMS Sectional Meetings, Central Fall Sec-

tional Meeting, Loyola University Chicago, Chicago, IL, October 2-4, 2015 (Friday - Sunday), Meeting # 1112.

(4) Generators for Comonoids and Universal Constructions (with Miodrag C Iovanov). Third Conference on Geometric Methods

in Representation Theory, University of Iowa, Iowa City, IA, November 24, 2014. _ Seminar Talks

- 1. Squarefree Monomial Ideals and Simplicial Complexes, University Thi-Qar, Mathematics Seminar (August 7, 2019).
- 2. The Group U(1) and Quantum Mechanics , University Thi-Qar, Mathematics Seminar (November 26, 2018).
- 3. n-representations of Quivers, University Thi-Qar, Mathematics Seminar (March 7, 2018).
- 4. Nakayama Functor and Quiver Representations, Iowa State University, Lie Theory Seminar (April 28, 2017).
- 5. Cofree objects in Centralizer and Center Categories (Talk 2), Iowa State University, Combinatorics/Algebra Seminar (October 17, 2016).
- 6. Cofree objects in Centralizer and Center Categories (Talk 1), Iowa State University, Combinatorics/Algebra Seminar (October 10, 2016).

- 7. Radical of Categories of Quiver Representations and Auslander{Reiten Quivers, University of Iowa Algebra seminar (February 29, 2016).
- 8. Irreducible Morphisms and Almost Split Sequences University of Iowa Algebra seminar (February 22, 2016).
- 9. Reection Functors and Gabriel's Theorem II, University of Iowa Algebra seminar (December 7, 2015).
- 10. Tortile and Monoidal Centers Categories University of Iowa, Algebra Student Seminar (November 18, 2015).
- 11. Tortile Yang-Baxter operators in Monoidal Categories, University of Iowa, Algebra Student Seminar (November 4, 2015).
- 12. Representations of Quivers, University of Iowa, Algebra Student Seminar (September 9, 2015).
- 13. Frobenius Extensions and Corings, University of Iowa Algebra seminar (May 4, 2015).
- 14. On Separability of Functors, University of Iowa Algebra seminar (April 6, 2015).
- 15. Galois Corings, University of Iowa Algebra seminar (February 9, 2015).
- 16. Galois Comodules, University of Iowa Algebra seminar (February 2, 2015).
- 17. Cofree Coalgebras in Other Monoidal Categories, University of Iowa Algebra seminar (November 17, 2014).
- 18. Species and Their Representations, Presentation for Topics on Algebra Class (November 14, 2014).
- 19. Free Objects in Certain Monoidal Categories, University of Iowa Algebra seminar (November 10, 2014)

_ Collaborative Conferences

(1) Generators for Coalgebras and Universal Constructions (with Miodrag C Iovanov_). New trends in Hopf algebras and tensor

categories, 2-5 JUNE 2015, Royal Flemish Academy of Belgium for Science and the Arts-Brussels.

(2) Cofree Coalgebras in Usual Monoidal Categories (with Miodrag C Iovanov_). AMS Special Session, Fall Eastern Sectional Meet-

ing Dalhousie University, Halifax, Canada, October 18-19, 2014, Meeting # 1103.

الصفحات السخصية والعلمية:

_ Personal Page: https://adnanalgebra.wixsite.com/homepage

- _ Courses Pages:
 - Group Theory Course Page: <u>https://grouptheoryadnanhabdulwahid.wordpress.com/</u>
 - Ring Theory Course Page: https://ringtheoryadnanhabdulwahid.wordpress.com/

Teaching Experience

_ Lecturer

(Department of Mathematics, University Thi-Qar)

_ Group Theory II: for three sections (A,B,C), Spring 2019

الخبرة التدريسية:

- _ Ring Theory II: for two sections (A,B), Spring 2019
- _ Group Theory I: for three sections (A,B,C), Fall 2018
- _ Ring Theory I: for two sections (A,B), Fall 2018
- _ Group Theory II: for three sections (A,B,C), Spring 2018
- _ Ring Theory II: for two sections (A,B), Spring 2018
- _ Group Theory I: for three sections (A,B,C), Fall 2017
- _ Ring Theory I: for two sections (A,B), Fall 2017
- _ Lecturer

(Department of Mathematics, Iowa State University)

- _ Math 207: Matrices and Linear Algebra (Sec C, D), Fall 2016
- _ Math 265: Calculus III (Sec U1, V1, W1), Fall 2016
- _ Math 317: Theory of Linear Algebra (Sec C), Spring 2017
- _ Math 165: Calculus I (Sec 27), Spring 2017
- _ Math 265: Calculus III (Sec 5), Spring 2017
- _ Independent Math Instructor (responsible for all course duties)
- (Department of Computer Science, University of Thi-Qar)
- _ Cryptography II, Spring 2010 (for computer science students)
- _ C++ Programming Language II, Spring 2010 (Theoretical and Lab)(for computer science students)
- _ Cryptography I, Fall 2009 (for computer science students)
- _ C++ Programming Language I, Fall 2009 (Theoretical and Lab) (for computer science students)
- _ Computation Theory I, Fall 2009 (for computer science students)
- _ Computation Theory II, Spring 2009 (for computer science students)
- _ Cryptography II, Spring 2009 (for computer science students)

_ C++ Programming Language II, Spring 2009 (Theoretical and Lab) (for computer science students)

- _ Computation Theory I, Fall 2008 (for computer science students)
- _ Cryptography I, Fall 2008 (for computer science students)
- _ C++ Programming Language I, Fall 2008 (Theoretical and Lab) (for computer science students)
- _ Cryptography II, Spring 2008 (for computer science students)
- _ Object Oriented Programming II, Spring 2008(for computer science students)
- _ C++ Programming Language II, Spring 2008 (Theoretical and Lab) (for computer science students)
- _ Cryptography I Fall 2007 (for computer science students)
- _ Object Oriented Programming I, Fall 2007 (for computer science students)
- _ C++ Programming Language I, Fall 2007 (Theoretical and Lab) (for computer science students)
- _ Advanced Mathematics and Numerical Analysis II, Spring 2007 (for computer science students)
- _ MATLAB Programming Language II, Spring 2007 (Numerical Analysis and ODEs)(Theoretical and Lab) (for computer science students)
- _ Advanced Mathematics and Numerical Analysis I, Fall 2006 (for computer science students)

_ MATLAB Programming Language I, Fall 2006 (Numerical Analysis and ODEs)(Theoretical and Lab)

_ Advanced Mathematics and Numerical Analysis II, Spring 2006 (for computer science students)

_ MATLAB Programming Language II, Spring 2006, (Numerical Analysis and ODEs)(Theoretical and Lab) (for computer science

students)

_ MS Office II, Spring 2006 (for chemistry students students)

_ Calculus II, Spring 2006 (for physics students students)

_ Advanced Mathematics and Numerical Analysis I, Fall 2005 (for computer science students)

_ MATLAB Programming Language I, Fall 2005, (Numerical Analysis and ODEs)(Theoretical and Lab) (for computer science

students)

_ MS Office I, Fall 2005 (for chemistry students students)

_ Calculus I, Fall 2005 (for physics students students)

_ Substitute Teaching

(Department of Mathematics, College of Liberal Arts and Sciences, University of Iowa)

_ Calculus for the Biological Sciences, Fall 2014

_ Calculus I, Fall 2014

_ T.A. (2004-2005) (Department of Computer Science, University of Thi-Qar)

(monitoring the students during examination and helping them in the labs).

_ Math Tutor, Department of Mathematics, College of Liberal Arts and Sciences, University of Iowa; Starting from May 6, 2015. My

name is on the tutor list for the following courses:

MATH:0100, 0200, 0300, 1010, 1020, 1240, 1250, 1340, 1380,1440, 1460, 1550, 1560,1850, 1860, 2150, 2550, 2560, 2650, 2660, 2700, 2850,

3550, 3720, 3770.

However, I was a tutor for an entire semester for the following courses

_MATH:2560 Engineer Math IV: Differential Equations, Summer 2016, University of Iowa

_ Differential Equations, Spring 2016, University of Iowa

_ Introduction to Linear Algebra, Spring 2016, University of Iowa

_ Calculus II, Fall 2015, University of Iowa

_ Math Teacher (2002)

(Observation and Application) (3 Months Experience of Teaching classes for High School students as a part of the requirements of a B.Sc.

in Mathematics, University of Thi-Qar)

Honors and Awards

_ HCED (Higher Committee for Education Development) (Award) Full Research Fellowship for a PhD in Mathematics at the University of Iowa (2010-2016)

_ Graduate College Summer Fellowship (University of Iowa) (Award) [Two Months Fellowship for supporting my research (06/01/2016 [07/31/2016)]

Service

_ Workshop organization: Visual Math Workshop (The Second Annual), University of Thi-Qar (April 26, 2018). It is an

undergraduate Students workshop. In this workshop, I was an advisor for about % 90 of the math undergraduate Students. I used

Carter's book: (Visual Group Theory) to show the students how visualizing math concepts is important to get a deep understanding for

mathematics notions. Students were interestingly working as groups on projects that are applications of Cayley diagrams.

_ Seminar organization: Algebra (Graduate) Student Seminar, University of Iowa (Fall 2015) (co-organizer with Kevin Gerstle)

اشراف الدراسات الاولية :Undergraduate Advisor

(Current)[since Fall 2017] (Department of Mathematics, University of Thi-Qar)

• (2008-2009) (Department of Computer Science, University of Thi-Qar)

Committees Works: اللجان

- Exam and Grading Committee (2018-2019): we were responsible of collecting the exam books and hiding the students' names to make sure the instructors grade them fairly.
- Exam and Grading Committee (2006-2010): we were responsible of collecting the exam books and hiding the students' names to make sure the instructors grade them fairly.
- Undergraduate Research Committee (2006-2009): our job was to discuss the projects of undergraduate students.
- Lab Services Committee: we were supplying the labs with their requirements to make sure they were working very well.

(الشهادات و بعض الكورسات المفيدة للعملية التدريسية) Licenses, Certificates, and Special Courses

_ Licenses and Certificates

• Teaching Certificates

المهارات Skills

-Programming Languages and Software

- GAP (Programming Language for computation in discrete abstract algebra)
- MATLAB Programming Language
- C++ Programming Language
- Microsoft Office
- LaTeX Programming
- Visual Basic Programming Language
- Language Skills
 - English
 - Arabic(native)

الجمعيات العلمية العالمية : Memberships

- AMS (American Mathematical Society)
- MGB (University of Iowa Math Graduate Board, an official university student organization established and led entirely by math graduate students)