

CURRICULUM VITAE
Ramesh V. Garimella, Ph.D.

OFFICIAL ADDRESS

Department of Mathematics
Korman 293
Drexel University
3141 Chestnut St.
Philadelphia PA 19104

SKILLS

- Extensive college level teaching experience over 25 years.
- Strong research record.
- Strong administrative experience as the math department chair at UCA from 2004-2022
- Solid experience in (a) developing new curricula and programs, (b) mentoring and advising students, (c) integrating technology to enhance student learning, and (d) Organizing outreach programs helpful to student recruitment.

EDUCATION

Ph.D. Mathematics University of Toledo **1986** (Area: Analysis),
M.Sc. Mathematics, Andhra University, India, **1980**
B.Sc. Andhra University, **1978** (Major: Mathematics, Minors: Physics & Chemistry)

EXPERIENCE

Associate Teaching Professor of Mathematics, Drexel University Sept 2023 - Present

Professor of Mathematics, University of Central Arkansas (UCA) July 2004 – June 2023

Chair of the Mathematics Department, UCA July 2004 - June 2022

Interim Chair, Department of Computer Science, UCA. July 2014 - July 2016
(This is in addition to my regular duties as chair of the Math Department)

Math Faculty Member, Tennessee Technological University July 1993 – July 2004
(Tenured and promoted to associate in 1997, promoted to full professor in 2002)

Math Faculty Member, Northwest Missouri State University July 1986 – July 1993
(Promoted to associate professor in 1992)

COURSES TAUGHT

Over the last 25 years I have taught the following courses multiple times.

Undergraduate courses	Graduate courses
Pre-Calculus	Abstract Algebra
Trigonometry	Complex Analysis
Business Calculus	Function Analysis
Elementary Statistics	Linear Algebra
Calculus I	Measure Theory
Calculus II	Number Theory
Discrete Math	Real Analysis
Multivariate Calculus	
Elementary Linear Algebra	
Differential equations	
Intermediate Analysis	
Rings and Fields	
Group Theory	
Advanced Calculus	
Cryptology	
Complex variables	

ADMINISTRATIVE EXPERIENCE

a. Chair, Department of Mathematics, UCA, July 2004 – June 2022.

- Supervised 20 faculty members, 15 graduate teaching assistants, and 2 administrative assistants.
- Programs: BS in Mathematics (Pure, Applied, Mathematics Education and Data Science) MA in Mathematics Education, and MS in Applied Mathematics.
- Students: Majors - 100, and graduate students - 20.
- Lead the department efforts in developing a master’s program in applied mathematics that began in Fall 2006. Successfully negotiated funding for ten graduate assistantships. First cohort of students graduated in 2008 Over 80 students have graduated from this program.
- Developed a data science track in the BS Program, which began in fall 2016.
- Developed Summer Programs in Mathematics and Sciences for middle and high school students. Since its inception in 2008, approximately 150 high school students have successfully completed the program. Several students who participated in the summer program came to UCA to pursue an undergraduate degree.

b. Interim Chair, Department of Computer Science, UCA, July 2014 - July 2016.

(This is in addition to my regular duties as chair of the Math Department).

- Supervised 10 faculty members, 1 administrative assistant, and 1 lab technician.
- Programs: BS Computer Science (ABET Accredited), and MS in Applied Computing.

- Students: Majors - 300 & Graduate students - 20
- Helped the dean to prepare a response to the ABET Report.
- Organized the CS Advisory Board meetings with local IT representatives for curricular development and collaborative enhancement.
- For the first time at UCA, with the help of UCA STEM Institute, organized several professional development summer workshops in computer science for high school teachers.

ADVSING & MENTORING

a. Undergraduate

- Advised 10 mathematics majors per academic year at UCA (2004 – 2022)
- Advised all transfer students and math minors at UCA (2006 – 2022)
- Mentored minority students at UCA (2012 – 2015)

b. Graduate

- Advised all first year MS students in Applied Mathematics at UCA (2006 - 2022).
- Advise all MS students in Applied Mathematics in non-thesis option at UCA (2006 - 2022).

c. Master's Theses Directed

- *Matrix Operators on some \mathcal{P} spaces* by Qiang Zhang, TTU, 2004.
- *On the invertibility of some operators on Hilbert spaces* by V. Hryniv, TTU, 2000.
- *Inequalities involving the maximum modulus of a polynomial* by D.Bilgili, TTU, 2000.
- *On the inclusions of L^p -spaces* by R. Jenkins, TTU, 1998.
- *A study of functions of bounded variation and generalized Hellinger integrals* by K. Selvidge II, TTU, 1995.

d. Doctoral Dissertation Committees

- An External Examiner for the Ph.D. Dissertation titled *A study of composition operators and elementary operators*, submitted to Banaras Hindu University (BHU), India, 2006
- An External Examiner for the Ph.D. Dissertation titled *A study of non-surjective composition operators on l^2 and induced derivations on Banach algebra $B(l^2)$* , submitted to BHU, India, 2004.
- Member of the Ph.D. Dissertation Committee of Shumin Tian titled *Transform Coding and Multiple Description Image Coding*, Department of Electrical Engineering, Tennessee Tech University, 2003.
- Member of the Ph.D. Dissertation Committee of Shewei Zhang's titled *Semi-ICA Estimation and Watermark Attack*, Department of Electrical Engineering, Tennessee Tech University, 2003.
- Member the Ph.D. Dissertation Committee of M. Sadok's titled *Wavelets and neural networks-based multiscale modeling with applications of human face recognition*, Department of Electrical Engineering, Tennessee Tech University, 2001.

SCHOLARLY ACTIVITIES

a. Selected Publication

- *Solving operator equations that arises from the KdV and other differential equations* (joint with Hryniv and Sourour), Proc. Amer. Math. Soc., 138, 2010, 717-724.
- *A solution of an operator equation related to the KdV equation* (joint with Hryniv and Sourour), Journal of Linear Algebra and Applications, Vol. 418, issues 2-3, 2006, 788-792.
- *Inequalities for absolute maxima of polynomial and its derivative* (joint with Yung-Way Liu), Analysis Mathematica, Vol. 29, 2003, 171-180.
- *On New Characterizations of some L^p spaces* (joint work with Jenkins), Int. J. Math. & Math. Sci., Vol. 23(7), 2000, 487-492.
- *Accessible prime ideals in commutative Banach algebras*, Journal of Indian Math. Soci., Vol. 66 (1-4), 1999, p. 177-183.
- *On automatic continuity of derivations and epimorphisms on some vector valued group algebras*, Bull. Aust. Math. Soci., Vol. 56(1), 1997, 209-215.
- *On Separating ideals of Commutative Banach algebras*, Interaction between Functional Analysis, Harmonic Analysis, and Probability, Marcel Dekker, Vol.175, 1996, 181-185.
- *On nilpotency of the separating ideal of a derivation*, Proc. Amer. Math. Soc., 117(1), 1993, 167-174.
- *Continuity of derivations on semiprime Banach algebras*, Proc. Amer. Math. Soci., Vol.99 (2), 1987, 289-292.
- *Closed subspaces of finite codimension in some function algebras* (joint work with N.V. Rao), Proc. Amer. Math. Soc., Vol. 101(4),

b. Selected Presentations

- *On the Spectrum of an absolute Norm attaining positive operators on a Hilbert space*, Analysis Seminar, Drexel University, October 2022
- *Absolute Norm attaining operators on Hilbert spaces*, Math Department Colloquium, Villanova University, October 2022.
- *Construction of the exact solution of an operator equation*, Departmental Seminar, University of Central Arkansas, August 2019.
- *On Solutions of operator equations*, 2010 Great Plains Operator Theory Symposium, University of Denver, Denver, CO, summer 2010.
- *A Special Compact Operator*, Invited Talk, Western AMS Sectional Meetings, Tucson, AZ April 2007.
- *On solutions of an operator equation related to some partial differential equations*, Invited Talk, Department of Mathematics Sciences, Worcester Polytechnic Institute, Worcester, January 2007.
- *On the invertibility of some operators on Hilbert Spaces* (joint work with Hryniv and Liu), Invited talk at a special session at the Joint Annual Meetings of AMS & MAA, New Orleans, January 2001.
- *On solutions of some operator equations on Hilbert spaces*, (by Garimella, Hryniv, and Liu); presented by Hryniv at the Twenty Forth Annual Meetings of SIAM, University of Georgia, Athens, March 2000.

c. Referee Work

- American Mathematical Society (AMS) Reviews.
- Journal of Mathematical Analysis and Applications.
- The Journal of Computational and Applied Mathematics.
- International Journal of Mathematics and Mathematical Sciences.
- The Missouri Journal of Mathematics Sciences.
- Cambridge University Press (Reviewed text books)

EXTERNAL FUNDING

- A Co-PI of the Summer 2021 STEM Academy at UCA, Arkansas Department of Education, December 2020. Amount Funded: **\$10,413**.
- A Co-PI of the Summer 2020 STEM Academy at UCA, Arkansas Department of Education, December 2019. Amount Funded **\$10,674**.
- A Co-PI of the project *Algebra- Connecting Concepts*, U.S. Department of Education through the Arkansas Department of Higher Education, 2016. Amount Funded: **\$60,699**
- A Co-PI of the project Algebra I: Implementation of Common Core Standards, Arkansas Department of Higher Education, 2011. Amount Funded: **\$133,000**;
- PI of the project MSIT Academy @UCA: A summer program for high school students, Arkansas Science and Technology Authority, 2011. Amount Funded: **\$10,000**, 2011.
- A Co-PI of the project K-4 Smarts, Arkansas Department of Education, 2010 Amount Funded: **\$67,225**, 2010.
- PI of the project MSI'08: The Mathematics and Sciences Investigators Program, Arkansas Science and Technology Authority, 2008. Amount Founded: **\$10,000**.
- A Co-PI of the project Using Tablet PC Technology to enhance learning in upper division mathematics courses, Hewlett- Packard, 2007. Amount Funded: **\$68,000** (includes 21 HP Tablet PC's).

WORKSHOPS ATTENDED RELEVANT TO TEACHING

- The Fifth Annual Reimagining Math Education Conference, Stevens Institute of Technology 2020 (online)
- The Third Annual Conference: Reimagining Math Education, Stevens Institute of Technology, November 2018
- The 22nd Institute on Teaching and Mentoring/ Compact for Faculty Diversity, 2015 Arlington, VA
- Mathematics in Data Science, ICERM Conference, Brown University, Providence, RI, Summer 2015,
- College Ready workshops in Mathematics and Physics Partnership, University of Arkansas, Summer 2011.
- EC2 INSTITUTE: Enhancing Content for Comprehension in Undergraduate Mathematics, University of Louisiana at Lafayette, 2010
- Participated in a NSF-Sponsored workshop on "Calculus and Pre-calculus- An Integrative approach," Harvard University, Summer 2001.

ADDITIONAL PROFESSIONAL EXPERIENCE

a. Proposal Reviews

- Reviewed NSF S-STEM Track 1 Program proposals (March 2022).
- Reviewed NSF S-STEM Track 1 Program proposals (May 2020).

- Reviewed NSF CCLI (Phase I) proposals (July 2008).
- Reviewed NSF CSEMS proposals (March 2004).
- Reviewed STEMTP proposals (November 2002).

OTHERS

University of Central Arkansas

- President of 2017 OK-AR Sectional MAA Spring Meetings, University of Oklahoma
- Organizer for 2016 OK-AR Sectional MAA Meetings, held on UCA Campus in April 2016.
- UCA Graduate Council Member (2005- 2013).
- UCA Undergraduate Council Member (2010- 2014).
- External Review Committee Chair for two master's programs and a doctoral program in mathematics at the Texas State University. November 2009.
- College Recruitment Team Member (2005- present).

Tennessee Technological University

- Member of the Faculty Senate (2002-2004).
- Member of Faculty Senate Administrative Council (2002-2005).
- Internal Reviewer for B.A. and M.A. Programs in English (2002).

Northwest Missouri State University

- University Faculty Research Committee Member (1988 -1991).
- University Faculty Senate Assessment Committee Member (1989 - 1991).
- University Faculty Senate Budget Committee Member (1991-1992).