

# CURRICULUM VITAE

**NAME** : Dr. SHAIK SAJANA  
**DATE OF BIRTH** : 10-05-1990  
**DESIGNATION** : Lecturer in Mathematics,  
Department of Mathematics and Statistics,  
PR Government College (A),  
Kakinada-533004.  
**MOBILE NUMBER** : +91 7893918849  
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**DATE OF JOINING AS LECTURER** : 07-06-2018  
**MODE OF APPOINTMENT** : Direct Recruitment by Andhra Pradesh Public Service  
Commission, Vijayawada

## EDUCATIONAL QUALIFICATIONS

**Ph.D.** : Mathematics (2014-2018)  
**Specialization** : Algebraic Graph Theory  
**Title of the Thesis** : Intersection Graph of zero divisors of the Commutative ring  
**College** : S.V. U. College of Sciences  
**University** : S.V. University, Tirupati  
**No. of Papers Publications** : 11 (National and International)  
**No. of Papers presented in Conferences**  
**/ Seminars Presented** : 15  
**No. of Conferences/ Seminars Attended:** 5  
**No. of Workshops Participated** : 7

**M. Sc.** : Mathematics (2010-2012)  
**College** : S. V. U. College of Sciences  
**University** : S. V. University, Tirupati  
**Percentage of Marks** : 78.70

**B. Sc.** : M.S.Cs. (2007-2010)  
**College** : E.S.S. Degree College, Venkatagiri, Nellore Dist.  
**University** : S. V. University, Tirupati  
**Percentage of Marks** : 82.78

**Intermediate** : M.P.C. (2005-2007)  
**College** : SBPM Junior College, Venkatagiri, Nellore Dist.  
**Board** : A. P. State Board of Intermediate Education  
**Percentage of Marks** : 83.30

**S. S. C.** : 2004-2005  
**School** : Z.P. Girls High School, Venkatagiri, Nellore Dist.  
**Board** : Board of Secondary Education  
**Percentage of Marks** : 79

#### **ADMINISTRATIVE SUPPORT RENDERED TO THE COLLEGE**

- Member in Time Table Committee.
- Member in Minority Welfare Committee.
- Member in Women Empowerment.

#### **ACHIEVEMENTS**

- Qualified **GATE-2013** with all India Rank **708**.
- Qualified in **State Eligibility Test for Telangana and Andhra Pradesh States-2014** (SET-TS & AP-2014).
- Awarded **UGC-MERITORIOUS BSR JRF & SRF** Fellowship.
- Got **4<sup>th</sup>** Rank in **SVU RECET-2013**.
- Got **1<sup>th</sup>** Rank in **SVURPGCET-2010**.

## PROFESSIONAL AFFILIATIONS

- Life Member in **ANDHRA PRADESH SOCIETY FOR MATHEMATICAL SCIENCES, INDIA**.(LM No: 957)
- Life Member in **INDIAN MATHEMATICAL SOCIETY, INDIA**.( L/2017/158)
- Life Member in **INDIAN SCIENCE CONGRESS, INDIA**.(L 31385)

## TEACHING EXPERIENCE

- Worked as a Lecturer in Mathematics in **Sri Srinivasa Degree College**, Balayapalli, Nellore Dist. from **June 2012 to Dec 2013**.
- Classes taught to M.Sc. Mathematics course in the **Department of Mathematics**, S.V.U. College of Sciences, S.V. University, Tirupati during **January 2014 - May 2018** as a Research scholar (Ph. D. - Full time) under the scheme of UGC - BSR (JRF & SRF) fellowship.

## SUBJECTS TAUGHT

- Differential Equations, Solid Geometry, Group Theory, Real Analysis, Ring Theory, Linear Algebra and Numerical Methods for Under Graduate Courses.
- Ordinary Differential Equations, Complex Analysis, Classical Mechanics, Discrete Mathematics, Mathematical Statistics for Post Graduate Courses.

## RESEARCH EXPERIENCE

- As a Research Scholar in the Dept. of Mathematics, S. V. University, Tirupati from **27/01/2014 to 24/12/2018**.

## SHORT TERM COURSES / TRAININGS

- **Completed a 12 Week NPTEL Online Certification course Matrix Solver** with a consolidated score of **66%** Coordinated by **Prof. Anupam Basu**, IIT Kharagpur during Jul-Oct 2018.
- **Completed a 2 Week Induction Training Programme for Newly Recruited Lecturers** in association with **Commissionerate of Collegiate Education** during 13-26, Aug 2018 at AP HRDI, Visakhapatnam.

## PAPERS PUBLISHED

1. **Shaik Sajana**, D. Bharathi, **Number Theoretic Properties of the Commutative Ring  $Z_n$** , International Journal of Research in Industrial Engineering (Article in Press)
2. K. K. Srimitra, D. Bharathi and **Shaik Sajana**, **DOMINATION OF GRAPH OF MOBIUS FUNCTION**, International Journal of Mathematics Trends and Technology, Vol. 56, No. 2 (2018), PP 95 – 100.
3. **Shaik Sajana** and D. Bharathi, **HAMILTONIAN PROPERTY OF INTERSECTION GRAPH OF ZERO DIVISORS OF THE RING  $Z_n$** , Malaya Journal of Matematik, Vol. 6, No. 1 (2018), PP 133 – 139.
4. K. K. Srimitra, D. Bharathi and **Shaik Sajana**, **ON THE SIGNED MOBIUS GRAPH FOR '0'**, Research Journal of Science and Technology, Vol. 9, No. 4 (2017), PP 521 – 524.
5. **Shaik Sajana**, D. Bharathi and K. K. Srimitra, **ON THE COMPLEMENT OF THE INTERSECTION GRAPH OF ZERO – DIVISORS OF THE RING  $Z_n$** , Research Journal of Science and Technology, Vol. 9, No. 3 (2017), PP 379 – 384.
6. K. K. Srimitra, **Shaik Sajana** and D. Bharathi, **SOME PROPERTIES OF GRAPH OF MOBIUS FUNCTION FOR '0'**, International Journal of Innovative Research in Science, Engineering and Technology, Vol. 6, No. 8 (2017), PP 17466-17471.
7. **Shaik Sajana**, D. Bharathi and K. K. Srimitra, **ON THE REDUCED INTERSECTION GRAPH OF A RING  $Z_n$** , International Journal of Advanced Research in Computer Science, Vol. 8, No. 6 (2017), PP 200-202.
8. **Shaik Sajana**, D. Bharathi and K. K. Srimitra, **SIGNED INTERSECTION GRAPH OF IDEALS OF A RING**, International Journal of Pure and Applied Mathematics(IJPAM), Vol. 113, No. 113 (2017), PP 175-183.
9. **Shaik Sajana**, K. K. Srimitra and D. Bharathi, **INTERSECTION GRAPH OF ZERO-DIVISORS OF A FINITE COMMUTATIVE RING**, International Journal of Pure and Applied Mathematics(IJPAM), Vol. 109, No. 7 (2017), PP 51-58.

10. K. K. Srimitra, **Shaik Sajana** and D. Bharathi, **ADJACENCY AND DEGREE OF GRAPH OF MOBIUS FUNCTION**, i – manager’s Journal on Mathematics, Vol. 5, No. 1 (2016), PP 31 – 38.
11. D. Bharathi and **Shaik Sajana**, **SOME PROPERTIES OF THE INTERSECTION GRAPH FOR FINITE COMMUTATIVE RINGS**, International Journal of Scientific and Innovative Mathematical Research (IJSIMR), Vol. 3, Special Issue 3 (2015), PP 1062-1066.

#### **PAPERS PRESENTED IN CONFERENCES / SEMINARS**

1. **Presented a paper** in UGC Sponsored Two Day National Seminar on “**Alternate Energy Resources for Sustainable Environment**” Organized by Dept. of Physics & Chemistry, PR Govt. College (A), Kakinada during 14-15, Feb 2019.  
Title of the Paper: **Applications of Mathematics in the Utilization of Solar Energy.**
2. **Presented a paper** in “**83<sup>rd</sup> Annual Conference of The Indian Mathematical Society – An International Meet - 2017**” held at S.V. University, Tirupati during 12-15, Dec 2017.  
Title of the paper: **Hamiltonian property of Intersection graph of zero-divisors of the Ring  $Z_n$ .**
3. **Presented a paper** in the “**National Conference on Recent Advances in Mathematics and its Applications**” held at Dept. of Mathematics, S.V. University, Tirupati on 29<sup>th</sup>, Aug 2017.  
Title of the paper: **Enumeration of Triangles in the Intersection Graph of Zero-divisors of the Ring  $Z_n$ .**
4. **Presented a paper** in the “**XXVI Congress of Andhra Pradesh Society for Mathematical Sciences and National Conference on Recent Advances in Mathematics**” organized by Dept. of Mathematics, Kakatiya University, Warangal, Telangana during 11-13, Aug 2017.  
Title of the paper: **Wiener Index of the Intersection Graph of Zero-divisors of the Ring  $Z_n$ .**
5. **Presented a paper** in the “**National Conference on Mathematical Techniques and their Applications (NCMTA-2017)**” conducted at SRM University, Kattankulathur, Tamil Nadu during 27-28, Jan 2017.  
Title of the paper: **Signed Intersection Graph of Ideals of a Ring.**

6. **Presented a paper** in “**104<sup>th</sup> Indian Science Congress**” held at S.V. University, Tirupati from 3-7, Jan 2017.

Title of the paper: **Reduced Intersection Graph for Finite Commutative Ring.**

7. **Presented a paper** in the “**National Conference on Recent Trends in Mathematics and its Applications**” held at Dept. of Mathematics, S.V. University, Tirupati during 22-23, Dec 2016.

Title of the paper: **Self-Centered Intersection Graphs.**

8. **Presented a paper** in the **Silver Jubilee Congress of APSMS-2016 and National Conference on “Emerging Trends in Mathematical Sciences and Applications in Engineering Sciences”** organized by N.B.K.R. Institute of Science and Technology, Vidyanagar during 9-11, Dec 2016.

Title of the paper: **Compliment of the Intersection Graph of Zero-Divisors of a Finite Commutative Ring.**

9. **Presented a paper** in “**2<sup>nd</sup> Andhra Pradesh Science Congress (APSC-2016)**” held at P.B. Siddhartha College of Arts and Sciences, Vijayawada during 7-9, Nov 2016.

Title of the paper: **Wiener Index of the Intersection graph of Ideals of Rings.**

10. **Presented a paper** in the Two Day National Seminar on “**Recent Trends and Applications in Mathematics and Statistics**” organized by Dept. of Mathematics and Statistics, Pithapur Rajah’s Government College (Autonomous), Kakinada during 28-29, Sep 2016.

Title of the paper: **Connectivity in the Intersection Graph of Ideals of Rings.**

11. **Presented a paper** in the “**International Conference On Discrete Mathematics-2016 (ICDM-2016) and Graph Theory Day-XII**” organized by Dept. of Mathematics, Siddaganga Institute of Technology, Tumakuru during 9-11, June 2016.

Title of the paper: **Counting Triangles in the Intersection Graphs of Ideals of Rings.**

12. **Presented a paper** in the “**National Conference On Mathematics and its Applications**” held at Dept. of Mathematics, S.V. University, Tirupati during 22-23, Dec 2015.

Title of the paper: **Radius and Diameter in the Intersection Graph of Zero-divisors.**

13. **Presented a paper** in the “**International Conference On Mathematical Computer Engineering (ICMCE-2015)**” Organized by the School of Advanced Sciences, VIT Chennai during 14-15, Dec 2015.

Title of the paper: **The Intersection Graph of Zero-Divisors of a Finite Commutative Ring.**

14. **Presented a paper** in the “**XXIV Congress of APSMS & National Conference on Recent Developments in Mathematical Sciences and their Applications to Science and Technology**” Organized by Dept. Mathematics, Humanities and Sciences, Vignana Bharathi Institute of Technology, Ghatkesar, Hyderabad during 11-13 Dec 2015.

Title of the paper: **Degree and Edges in the Intersection Graph of Zero-Divisors.**

15. **Presented a paper** in the “**International Conference on Mathematical Sciences (ICMS-2015)**” held at Dept. of Mathematics, S.V. University, Tirupati during 13-15, July 2015.

Title of the paper: **Some Properties of the Intersection Graph for Finite Commutative Rings.**

#### CONFERENCES / SEMINARS ATTENDED

1. **Participated** in the “**UGC National Seminar on Recent Trends And Challenges In Mathematical Sciences**” organized by Dept. of Mathematics, S. K. University, Anantapuramu during 28-29, Nov 2015.
2. **Participated** in the “**National Conference on Recent Trends and Advances in Mathematics and its Applications (NCRTAMA-2015)**” organized by Dept. of Applied Mathematics, SPMVV, Tirupati during 12-13, Mar 2015.
3. **Participated** in the “**XXIII Congress of APSMS and National Conference on Mathematics**” Organized by Dept. of Sciences & Humanities, Vignan’s University, Vadlamudi during 12-14 Dec 2014.
4. **Participated** in the “**II International Conference on Applications of Fluid Dynamics**” held at Dept. of Mathematics, S.V. University, Tirupati during 21-23, July 2014.
5. **Participated** in the “**National Conference on Recent Developments In Mathematics And Its Applications**” held at Dept. of Mathematics, S.V. University, Tirupati on 29<sup>th</sup>, Jan 2014.

## WORKSHOPS PARTICIPATED

1. **Participated** in the **UGC Sponsored One Day National Workshop on “R”** organized by the Departments Mathematics and Economics, A.S.D. Govt. Degree College for women (A), Kakinada on 16, Feb 2019.
2. **Participated** in **Two Day National Level Hands on Workshop on Latex** organized by Dept. of Applied Mathematics and Computer Science, SPMVV, Tirupati during 28-29, Mar 2018.
3. **Participated** in the ‘**Science Academies’ Lecture Workshop on Applications of Differential Equations in Engineering and Biology** held at Dept. of Mathematics, S.V. University, Tirupati during 9-11, Mar 2017.
4. **Participated** in the Pre-Conference Workshop on **Recent Advances in Signed Graphs and their Applications** organized by Dept. of Mathematics, Siddaganga Institute of Technology, Tumakuru during 6-8, June 2016.
5. **Participated** in the ‘**Science Academies’ Lecture Workshop on Theoretical and Computational Fluid Dynamics (SALW-2016)** organized by Dept. of Mathematics, S.V. University, Tirupati during 21-22, Mar 2016.
6. **Participated** in a two day workshop on **Research Methodologies and LATEX** organized by Dept. of Mathematics, Madanapalle Institute of Technology and Science, Madanapalle during 21-22, Feb 2015.
7. **Participated** in the ‘**Science Academies’ Lecture Workshop on Mathematical Modelling in Science and Engineering (SALW-2012)** held at Dept. of Mathematics, S.V. University, Tirupati during 24-25, Jan 2012.

## FACULTY DEVELOPMENT PROGRAMMES

- **Participated** in the “**Faculty Development Programme**” at DST-PURSE CENTRE organized by ED CELL, Dept. of Management Studies, S.V. University, Tirupati during 10-24, Mar 2014.