Ramanujan College

FACULTY PROFILE

FIRST NAME	RAHUL	MIDDLE NAME (if any)			PHOTOGRAPH (ATTACH BELOW)		
LAST NAME	SINGH						
DEPARTMENT	Mathematics						
DESIGNATION	Assistant Professor						
GENDER	Male						
DATE OF BIRTH DD/MM/YYYY (optional)	01/01/1987						
LANGUAGE PROFICIENCY	English & Hindi						
ADDRESS	H.No 275, Vill Dadayara, Post. & Dist Hapur, UP-245101						
MOBILE (optional)	+91-9015648426						
EMAIL	rahul.singh1187@gmail.com rahul.singh1187@ramanujan.du.ac.in						
EDUCATIONAL Q	UALIFICATIONS:						
DEGREE	DEGREE INS				YEAR		
Ph.D.	Delhi Technological Univ	niversity, New Delhi		Pursui	ursuing		
M.Tech.	I.I.T. Delhi	I.I.T. Delhi		2011	2011		
M.Sc.	Ch. Charan Singh Univer	Ch. Charan Singh University, Meerut, UP		2007	2007		
B.Sc. Ch. Charan Singh Un		sity, Meerut, UP		2005			

CAREER PROFILE: TEACHING EXPERIENCE: 12+Years

- Assistant Professor, Ramanujan College, University of Delhi (24th July 2013- Present)
- Assistant Professor, Deshbandhu College, University of Delhi (30th July 2012- 23rd July 2013)

CAREER PROFILE: INDUSTRY EXPERIENCE

ADMINISTRATIVE ASSIGNMENTS: (List any administrative roles or responsibilities you have held)

- **Proctor**, Ramanujan College, University of Delhi (5th September 2024- Present)
- **Teacher In-Charge,** Department of Mathematics, Ramanujan College, University of Delhi (27th November 2024- Present)
- Member, Foundation Day Celebration Committee (Foundation Day-19th December 2024)
- Member, Infrastructure, Development & Monitoring Committee, Ramanujan College (11th September 2024- Present)
- Principal's Nominee, Permanent Defacement Protection Committee, Ramanujan College (24th October 2024- Present)
- Member, Committee for the Prevention of Defacement of Property, Ramanujan College (12th September 2024- Present)
- Member, Canteen Committee, Ramanujan College, University of Delhi (2023-24, 23rd August 2024- Present)
- Member, Student's Union Advisory Committee, Ramanujan College, University of Delhi (2018-19, 2023-24, 23rd August 2024- Present)
- Member, Discipline Committee, Ramanujan College, University of Delhi (2013-24)
- Member, NCC Boys Committee, Ramanujan College, University of Delhi (2018-22)
- Member, Workload Committee, Ramanujan College, University of Delhi (2016-17)
- Member, Admission Committee (B.A. (Prog), Ramanujan College, University of Delhi (2015-17)
- Member, Placement Cell Committee, Ramanujan College, University of Delhi (2013-16)

AREAS OF INTEREST / SPECIALIZATION: (Highlight your specific areas of interest or fields of specialization within your subject area)

- **Teaching:** Numerical Analysis, Linear Programming & its applications
- **Research:** Cryptography, Image Processing

SUBJECTS TAUGHT: (List all the subjects you have taught)

- Numerical Analysis
- Operation Research
- Calculus
- Ordinary Differential Equations

- Partial Differential Equations
- Linear Algebra
- Discrete Mathematics
- Real Analysis
- Operation Research
- Multivariate Calculus
- Computer Algebra System & related software
- Network Flow

COURSE DEVELOPMENT: (Mention any courses	ou have develope	d or contributed	d to designing)
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RESEARCH GUIDANCE: (Provide details on research supervision, indicating the number of doctoral and postgraduate students guided)

PUBLICATIONS PROFILE: RESEARCH PAPERS (List your published research papers, including the title, journal, and year)

- Rahul Singh, Maneesh Kumar, Alok Kumar, Dheeraj Tiger, Braid Group: A completely new Algorithm, Indian Journal of Research PARIPEX, Volume: 4, Issue :12, December-2015, ISSN: 2250-1991.
- Alok Kumar, **Rahul Singh,** Dheeraj Tiger, Groebner Basis and its Applications, Indian Journal of Research PARIPEX, Volume: 4, Issue :11, November 2015, ISSN: 2250-1991.
- Rahul Singh, Kamini Rawat, Aarti Kadiyan, Simulation of traffic flow in presence of traffic light using Cellular Automata, International Journal of Scientific Research, Volume: 4, Issue: 6, June 2014, ISSN: 2249-555X.
- Rahul Singh, Ms. Parveen Bawa, Ranjan Kumar Thakur, Road Traffic Noise Prediction Model, Indian Journal of Research PARIPEX, Volume :3, Issue :4, April 2014, ISSN-2250-1991.
- Maneesh Kumar, **Rahul Singh**, A (2, n) and (3, n) Visual Cryptography Scheme for Black and White Images, International Journal of Science and Research (IJSR), Volume :3, Issue :3, March 2014, ISSN: 2319-7064.
- Maneesh Kumar, **Rahul Singh**, Harsh Verdhan Singh, A Mixed Integer Programming Solution for Transmission Switching in Power System, International Journal of Advances in Management and Economics, Volume :3, Issue :2, March-April 2014, ISSN: 2278-3369.

PUBLICATIONS PROFILE: BOOK CHAPTERS (List your published book chapters, including the title, publisher, ISBN and year)
PUBLICATIONS PROFILE: OTHERS (Mention any other relevant publications details)
CONFERENCE / WORKSHOPS/ REFRESHER/ FDP/ TRAINING ORGANIZED
 Member, Organizing Committee of the "International Conference on Graphs, Networks and Combinatorics (ICGNC 2023)" organized by Department of Mathematics, Ramanujan College, University of Delhi during 10th -12th January 2023. The conference was sponsored by SERB, UGC, DRDO, IOCL and ONGC [Received a Funding of 21 Lakhs Rupees]. Member, Organizing Committee of the "International Conference on Applicable Mathematics" with the theme "Network Science" organized by Department of Mathematics, Ramanujan College, University of Delhi held during 19th -21st December 2019. Member, Organizing Committee of the two weeks online "Refresher Course in Mathematics" under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching, Ministry of Human Resource Development (MHRD) from 16th -30th March, 2021. Member, Organizing Committee of the online workshop on "Recent Trends in Domination and Graph Labelling (RTDGL, 2021)" organized by Department of Mathematics, Ramanujan College, University of Delhi in collaboration with Academy of Discrete Mathematics and Applications (ADMA) held during 27th -31st May 2021. Member, Organizing Committee of a "Faculty Development Programme on Computational, Mathematical and Statistical Techniques (CMST-2014)" held at Ramanujan College (University of Delhi) from 31st October -1st November 2014. Member, Organizing Committee of the "INSPIRE Internship Program-2012" organized by Desh Bandhu College, University of Delhi & Department of Science & Technology Government of India, held from 1st -5th October, 2012.

CREATION OF ICT MEDIATED TEACHING LEARNING PEDAGOGY AND CONTENT CONFERENCE/WORKSHOPS/TRAINING ATTENDED AS FACULTY MEMBER

- Participated in a "20-Days Certificate Course (40 Hrs.) / Refresher Course" on "Shrimad Bhagavad Gita: Enlightenment and Relevance" organized by BHARATAM Bhartiya Gyan Parampara: Adhyayan, Adhyapan Evam Anusamdhan Kendra", & TLC, Ramanujan College, University of Delhi held from 22nd December 2023 -10th January 2024 with **grade A+.**
- Participated in a 2-week "Interdisciplinary Refresher Course" in "RESEARCH METHODOLOGY & DATA ANALYSIS" organised by TLC, Ramanujan College, University of Delhi under the aegis of PMMMNMTT, Ministry of Education held from 14th 28th December 2023 with **grade A+.**
- Participated in a 2-week "Refresher Course" in "Mathematical Sciences" organised by TLC, Ramanujan College, University of Delhi, in collaboration with Sri Sarada College of Women (Autonomous) Affiliated to Periyar University, under the aegis of PMMMNMTT, Ministry of Education held from 31st Oct -14th Nov 2023 with **grade A+.**
- Participated in a 2-week "Refresher Course in Mathematics (Theme: Python & Vedic Mathematics)" organised by TLC & Department of Mathematics, Ramanujan College, University of Delhi in collaboration with Department of Mathematics, Sri Jayachamarajendra College of Engineering (SJCE) JSS Science and Technology University (JSS S&TU), Mysuru under the aegis of PMMMNMTT, Ministry of Education held from 13th 26th July 2023 with **grade A+.**
- Participated in a 4- week "Faculty Induction Programme" on "Faculty in Universities/ Colleges/ Institutes of Higher Education" organized by TLC, Ramanujan College, University of Delhi under the aegis of Pandit Madan Mohan Malviya National Mission on Teachers and Teaching, Ministry of Human Resource Development (MHRD) in collaboration with Army Institute of Education (AIE) affiliated to Guru Gobind Singh Indraprastha University, Delhi held during 23rd April- 22nd May 2023.
- Participated in a 2-week "Refresher Course in Statistics (Theme: Applications of Statistical Techniques in Real World)" organized by TLC, Ramanujan College, University of Delhi under the aegis of Ministry of Education, PMMMNMTT, held from 1st-15th May, 2021 with **grade A+.**
- Participated in an "International Conference on GRAPH LABELING AND APPLICATIONS ICGLA-2020" organized by Department of Mathematics, Goa University, Goa held from 17th -19th September 2020.
- Participated in an **International Workshop** on "Geometry of Continued Fractions: Ramanujan and his successors" organized by Department of Mathematics, Central University of Himachal Pradesh, Dharamshala, HP held from 14th -15th September 2020.

- Participated in a **National Webinar** on "**Financial Mathematics: Pedagogy and Career Perspectives**" organized by Department of Mathematics, Lady Shri Ram College for Women, University of Delhi held from 27th -31st July 2020.
- Participated in a "Faculty Development Programme" on "Online Teaching-Learning Methods and Emerging Trends in Research
 in the Post Covid-19 Times" organized by College UGC Committee and IQAC of SSV College, Hapur, CCS University, Meerut held
 from 25th -29th July 2020.
- Participated in the online "National Instructional Workshop on Cryptology" organised by School of Computer and Systems Sciences, Jawaharlal Nehru University, New Delhi in association with CRSI held from 22nd- 26th July 2020.
- Participated in an online International Conference on "Recent Trends in Mathematics and its Applications to Graphs, Networks and Petri Nets (ICRTMA-GPN-2020)" organized by School of Computational and Integrative Sciences, Jawaharlal Nehru University, New Delhi-110067, India, held during 20th -24th July, 2020.
- Participated and completed all the requirements of two week (equivalent to 3 credit 40 hours course) online FDP on "Advanced Optimization Techniques and hands-on with MATLAB/SCILAB" jointly organized by Electronics and ICT Academies of MNIT Jaipur, NIT Patna & PDPM IIIT DM Jabalpur under the "Scheme of financial assistance for setting up of Electronics and ICT Academies" by the Ministry of Electronics and Information Technology (MeitY), Government of India. This programme is endorsed by AICTE/UGC/NBA, held from 13th -24th July 2020.
- Participated in a 1-week "Pedagogical Training for Teachers: Tools for Online Teaching Learning and Evaluation" organized by School of Mathematical Sciences, Swami Ramanand Teerth Marathwada University, Nanded held from 1st -6th July 2020.
- Participated in a "Faculty Development Programme: Python Programming" organized by IQAC, A.N. College, Patna held from 25th June 9th July 2020.
- Participated in a 2-weeks **Faculty Development Programme** on "**R Programming**" organized by IQAC, A.N. College, Patna in association with IIT Bombay through Spoken Tutorials, Remote Learning (An Initiative of National Mission on Education through ICT, MHRD Govt. of India) held during 8th -17th June, 2020.
- Participated in a **Faculty Development Programme** on "**Teachers, Teaching and Taught: Discovering New Meanings, Relationships and Purpose**" organized by IQAC & TLC, Ramanujan College, University of Delhi (sponsored by UGC NAAC) held during 1st -7th January 2020.
- Participated in a 1-week a **Faculty Development Programme** on "**ICT Integrated Research in Mathematical Sciences**" organized by Ramanujan Center for Applied Mathematics and Research and Teaching Learning Centre (sponsored by MHRD) Ramanujan College, University of Delhi held from 24th -30th September 2018.
- Participated in a "Teacher Enrichment Workshop" on "Differential Equations, Mathematical Modelling & Analysis" organized by Deshbandhu College, University of Delhi held from 24th 29th July 2018.
- Participated in a workshop on "Computational Optimization" organized by Sri Venkateswara College, University of Delhi, held on 5th February, 2016.
- Participated in a **Faculty Development Programme** on "Computational, Mathematical and Statistical Techniques (CMST-2014)" organized by Ramanujan College, University of Delhi held from 31st October-1st November 2014.

• Participated in a "Under Graduate Teachers Enrichment (UGTE) Programme" on "Finite group and Applications" organized by					
Ramanujan Mathematical Society (RMS) & Deshbandhu College, University of Delhi held from 7 th -9 th February 2014.					
• Participated in a "Under Graduate Teachers Enrichment (UGTE) Programme" on "Number Theory" organized by Ramanujan					
Mathematical Society (RMS) & Lady Shri Ram College for Women, University of Delhi held from 8 th -9 th November 2013.					
• Participated in the "MATLAB and Simulink Academic Tour 2013" of Math Works organized by Cluster Innovation Centre, University of Delhi on 23 rd September, 2013.					
• Participated in a Workshop on foundation course "Building Mathematical Ability" organized by the University of Delhi held from 24 th 26 th June 2013.					
• Participated in an "International conference" on "The Legacy of Srinivasa Ramanujan" organized by the Department of Mathematics					
University of Delhi held from 17 th -22 nd December 2012.					
VITED LECTURES AS RESOURCE PERSON AND PAPER PRESENTATIONS:					
ESEARCH PROJECTS (MAJOR GRANTS/RESEARCH COLLABORATION)					
VARDS AND DISTINCTIONS:					

ASSOCIATION WITH PROFESSIONAL BODIES:

OTHER ACTIVITIES: (Include any additional relevant activities or contributions not covered in the above sections.)

- Qualified Joint CSIR-UGC Junior Research Fellowship (JRF) in Mathematical Science, June 2009 with AIR-31.
- Qualified Joint CSIR-UGC Junior Research Fellowship (JRF) in Mathematical Science, June 2010 with AIR-38.
- Qualified Joint CSIR-UGC National Eligibility Test for Lectureship (NET) in Mathematical Science of Dec 2008.
- Qualified **GATE** 2009 (Mathematics) with **AIR-67**.
- Qualified GATE 2012 (Mathematics) with AIR-97.
- Qualified GATE 2018 (Mathematics) with AIR-96.