Aryabhatta College

Department of Computer Science

(Annual Report for the Academic session 2020 to 2021)

1) Name of Teacher in Charge Dr. Priti Jagwani

2) Brief details of Faculty members

Dr. Ranjan Kumar, Assistant Professor
Dr Ranjan Kumar is Assistant Professor at Department of computer science since September 2005. He did his MCA from Department of Computer Science, University of Delhi and Ph.D. from M.U., Bodhgaya. He has worked as Teacher-in-charge in Computer Science Department from 2005 to 2015. His area of interest are Theory of Computation, Data Science, Machine Learning, and Database. He has presented may papers in various National and International conferences. He has also published many research papers in reputed journals. He has also contributed as convener or member in various committees of the college such as Building Committee, PF Committee, Workload Committee, Website Committee, Academic Planning Committee, Research Publication and Extension Committee, etc.

Dr. Priti Jagwani , Assistant Professor
Dr. Priti Jagwani is an alumni of IIT Delhi. She has received her MTech and Ph.D. from IIT Delhi. Currently she is serving as assistant professor in dept. of computer science, Aryabhatta College, University of Delhi. She has served the academia for more than 15 years. She has published many papers with Springer, IEEE and Inderscience publishers. She is also working as a reviewer for many conferences of repute and presented her research papers in international conferences at Japan and China. She is the recipient of prestigious Top 50 Women in Education Leaders award (2019) by World Education Congress. She has been associated with National Council for Promotion of Sindhi Language (NCPSL) as Computer Expert. Under this initiative she has delivered many talks for enrichment of Sindhi Language. She has also delivered more than 100 lectures for CEC through VYAS channel since 2019.

Dr. Sonal Linda, Assistant Professor
Dr. Sonal Linda is Assistant Professor at Department of computer science since October 2015. She served as TIC, Computer Science Department during 2017-2018 and 2019-2020. She did her B.Sc. in Computer Science from St. Xavier's College Ranchi, Jharkhand. She did her MCA, M. Tech and Ph.D. in Computer Science from Jawaharlal Nehru University, New Delhi. She served in various committees and has 6 years of experience in teaching and research. She has published 2 SCIE indexed International Journals research papers. She has presented and published 3

International Conferences research papers. She has received best paper award in an International Conference. Her areas of interest are Artificial Intelligence, Machine Learning, Data Mining, Database Management System.

Ms. Mona Adlakha , Assistant Professor(Adhoc)

Ms. Mona Adlakha is currently serving as an Assistant Professor in the Department of Computer Science, Aryabhatta College (University of Delhi) since July 2016. She graduated from St. Stephen's College (Univ. of Delhi) in 1995 with a B.Sc. (Hons) in Physics. In 1998 she completed her Masters in Computer Applications (M.C.A.) from Kurukshetra University and started her career in the software industry. At Aithent Technologies Pvt. Ltd (erstwhile Software Services International Pvt. Ltd.) she worked in various projects in the banking & finance, insurance, healthcare and business solutions. In August 2002 she joined as Lecturer at Kalinda College (University of Delhi) to contribute to academia. Later she joined as Assistant Professor at Ram Lal Anand College (University of Delhi) and served there from August 2006 to September 2013. During this time, she completed her M.Phil. form Madurai Kamraj University in May 2009. She joined Maitreyi College (University of Delhi) from July 2014 to August 2015. She has also served as a Guest faculty for undergraduate and post graduate students in few colleges of University of Delhi.In the past 18+ years she has taught various papers in computer science to undergraduate and post graduate students. She has authored chapters for IGI Global (USA) & CBSE and lessons for Institute of Life Long Learning (ILLL), University of Delhi. Her areas of interest include database management systems, software engineering, machine learning and information security. At Aryabhatta College she has been actively involved in the functioning of the Website Committee and NAAC Committee, among others. As Convener/ Co-Convener of TechPioneers (Computer Science Society) she has been instrumental in building the foundation of the society. Ms Adlakha is an important member and key resource person in the newly formed Training Team at Aryabhatta College. She is a Certified Digital Teacher by ICT Academy.

Ms. Ruchika Aggarwal , Assistant Professor(Adhoc)

She was an Assistant Professor at Department of computer science since July 2016. She did B.SC.(Hons) Computer Science from DU in 2010 and MCA from GGSIPU in 2013. Worked as Project Officer in Common-Wealth Games Organisation. Worked as Software Engineer in NIIT Technologies Ltd. Her areas of interest were Software Engineering (Test data generation), Data Mining, Knowledge Discovery using Classification.

Ms. Neha Kumari, Assistant Professor(Adhoc)

Ms. Neha Kumari is Assistant Professor at Department of computer science since July 2017. She did MCA from IGNOU. She has more than 12 year's year of experience in teaching. She has worked as Assistant Professor at Dept. of computer science, Rajdhani college, DU on Ad-hoc basis from January 2013 to july 2015 and july 2016 to june 2017 also Worked as Guest Faculty(B.Tech) at Rajdhani College, University of Delhi from August 2015 to December 2015. She has Worked as Guest faculty at Atma Ram Sanatan Dharma College, University of Delhi from July 2011 to April 2012 & january2016 to April 2017, and also Worked as a faculty (BCA & MCA) at study center of IGNOU, Vikaspuri from Jan 2009 to Dec 2011. She has published six research papers in National and International Journals.

Mr. Raj Kumar Sharma , Assistant Professor(Adhoc)

Mr. Raj Kumar Sharma is a professional with 32 years of experience and fulfills multiple roles as educators, researchers, and professionals having a broad range of backgrounds, scholarly interests and areas of expertise thereby bringing substantial achievement in professional practice and research into the classroom. Besides high-quality teaching, actively involved in basic and applied research through various projects and consultancy. Teaching various courses (Computer Programming, Networks, Graphics, and Data Analytics with Python)

3) Student Strength

First Year	Second Year	Third Year
56	50	44

4) Details of publication work by the faculty members

Dr. Sonal Linda, Assistant Professor
• Co-authored paper titled "Effective Context-Aware Recommendations Based on Context Weighting Using Genetic Algorithm and Alleviating Data Sparsity" published in *Applied Artificial Intelligence*, 34 (10), 730-753. 16th June, 2020.

5) Participation of faculty members in seminars/workshops ,etc

Mrs. Mona Adlakha, Assistant Professor
• Resource Person for a week-long online in-house Faculty Empowerment Program on 'E-Tools for Online Teaching', organized by the Training Team, Aryabhatta College, University of Delhi, 6-13th July, 2020.
• Resource person for a week-long Faculty Training Programme on 'Prospects and Challenges of Google Suite in Teaching and Learning', organized by Academic Affairs Committee, Swami Shraddhanand College, University of Delhi, 21st-28th August, 2020.
• Completed a two-week Faculty Development Programme on 'Managing Online Classes and Co-Creating MOOCS', conducted by Teaching and Learning Center, Ramanujan College, University of Delhi, under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, MHRD, 18-3rd June, 2020.
• Completed a week-long online certificate course on 'Digital Teaching Techniques', conducted by ICT Academy, 29-4th July,2020.
• Completed a week-long national Faculty Development Programme on 'Pedagogical Training for Effective Online Teaching and Learning', organized by DDU College, University of Delhi, in association with K.R.T. Arts, B.H. Commerce and A.M. Science (K.T.H.M.) College, Nashik, 3-10th August, 2020.
• Completed a week-long national Faculty Development Program on 'Developing Multimedia Enriched Powerful Presentations', organized by Guru Angad Dev Teaching Learning Centre SGTB
• Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, MHRD, 11-16th August, 2020.
• Completed a five-day online workshop on "Moodle: Learning Management System" organized by the Department of Electronics and Department of English, Shaheed Rajguru College of Applied

- Sciences for Women, University of Delhi, 8- 12th June, 2020.
- Participated in a two-day online national workshop on 'Online Teaching- Learning Using LMS - MOODLE', organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College,
- University of Delhi, under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of MHRD), 17-18th July, 2020.
- Attended a webinar series on 'Transforming Teaching Learning Process Using ICT Tools', organized by IQAC, PGDAV College, University of Delhi, 23rd-25th July, 2020.

Dr. Ranjan Kumar, Assistant Professor
- Completed a two-week Faculty Development Programme on 'Advance Concepts for Developing MOOCS', organised by TCL, Ramanujan College, University of Delhi,02nd-17th July, 2020.
- Completed a four-week MOOC course on 'Reproducible Research', conducted by Johns Hopkins University through Coursera on 14th April, 2020.
- Completed a four-week MOOC course on 'The Data Scientist's Toolbox', conducted by Johns Hopkins University through Coursera on 9th April, 2020.
- Completed a four-week MOOC course on 'Getting and Cleaning Data', conducted by Johns Hopkins University through Coursera on 10th May, 2020.
- Participated in a week-long Short Term Training Programme (STTP) on 'Data Science & Learning Systems for Engineering Research & Design, organised by NIT, Kurukshetra, 24-30th June, 2020.
- Participated in an online continuing education programme on 'Machine Learning Models for Disease Diagnosis: A Practical Approach', organized by NIT, Warangal, 20-24th December, 2020.

Ms. Ruchika Aggarwal, Assistant Professor
- Coordinator for a webinar on Cyber Security'. Speaker: Rakshit Tandon, 4th May, 2020.
- Participated in a week-long Faculty Development Programme on 'Basics of online teaching and learning', organized by Indraprastha College for Women, University of Delhi. 24-30 July, 2020.
- Attended a webinar on 'ICT Enabled Higher Education in India: Challenges and Opportunities', organised by Guru Angad Dev Teaching Learning Centre of MHRD. 15 April, 2020.

Dr. Sonal Linda, Assistant Professor
- Awarded Ph.D. in Computer Science (Jawaharlal Nehru University, New Delhi) on 05th October, 2020 against the successful submission of thesis titled "Context-Aware Recommender Systems:
- Possible Extensions and Challenges".
- Participated in a two-week long Faculty Development Programme on 'Managing Online Classes and Co-Creating MOOCS 3.0' organised by TLC, Ramanujan College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, MHRD. 25th July- 10th August, 2020.
- Participated in a month-long online Induction Training/ Orientation Programme for faculty in
- Universities/Colleges/ Higher Education Institutions under the Minsitry of Education, sponsored by Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, MHRD. 10th November-09th December, 2020.
- Completed a two-week Refresher Course/Faculty Development Programme in Statistics on "Applications of Statistical Techniques in Real World" organized by TLC, Ramanujan College
- under the Ministry of Education, sponsored by Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), 01st-15th May, 2021.

- Completed a two-week interdisciplinary Refresher Course/Faculty Development Programme on "Research Methodology and Data Analysis" organized by TLC, Ramanujan College under the Ministry of Education, sponsored by Pandit Madan Mohan Malaviya National Mission on
- Teachers and Teaching (PMMMNMTT). 17th- 31st May, 2021.

6) Achievement of Students including their participation in various societies

Year	Name of the award/medal	Term/Individual	University/state/National/International	Sports/Cultural	Name of the student
2021	News Reading Mania	Individal	University of Delhi, Delhi	Competition	Nupur Joshi
2021	KASTURI - Inter College Youth Festival	Individal	Kanoria PG Mahila Mahavidyalya, Rajasthan university, Jaipur	Debate competition	Shubham Kumar Bhakta
2020	Game-A-Thon	Individal	International	Competition	Pratham Gwari

7) Co-curricular Programmes conducted by the Department

Workshop Organized

TechPioneers successfully organized the **In-House Skill Development Workshop on "Augmented Reality"** (12th & 13th February 2021). The resource person for the workshop was Syed Mohammed Yadullah Abidi, 3rd year student of B.Sc. (H) Computer Science of the college. The primary objective of this workshop was to make students aware of the various prospects of Augmented Reality (AR) and how to work with Unity software for creating exciting projects/apps on the same.

Annual Tech Fest – Celestech'21

TechPioneers, successfully organized their Annual Technical Fest CELESTECH'21 on 3rd March 202, in online mode. The day had multiple technical and fun-filled events. Inquizitive, quizzed he participants on their technical skills. Codathon tested the students coding skills on the HackerEarth platform. Internet Scavenger Hunt was an information-based/ puzzle hunt in which teams used their collective brainpower to solve clues. Celestech'21 received an overwhelming response in all its events. Over 100 students from various colleges across Delhi NCR enthusiastically participated in the events.

Webinar

Seeing the changes in the technology requirements in the industry, TechPioneers organized a webinar on **"Technology Trends in 2021 and Career Opportunities"** on 8th April 2021. Mr Jatinder Bansal, Asia CIO (Siegwerk), was the speaker for the webinar. Mr Bansal shared stories from his experience across different industry verticals, while sharing the current technology needs. The speaker give a comprehensive list of trending career opportunities and the skills required for the same.

8) Library Budget sanctioned for the Department; **125LAC**

9) (Strength ,Weakness , Opportunities, Challenges) SWOC Analysis of the Department

1 STRENGTH

1. Experienced & Committed Teachers
2. Well-equipped lab with internet facilities
3. Motivating and dedicated faculty members
4. Good result and increase in student strength.
5. ICT enabled teaching

2 WEAKNESSES

1. No separate space for the departmental library
2. No interdisciplinary activities
3. Common sitting area for faculties

3 OPPORTUNITES

1. To help and guide poor and average students
2. To increase campus placements
3. To improve soft skill for personality development.
4. To train students to face entrance tests like MCA, M.Sc.,MBA, GATE, NET and CAT
5. To provide quality education and special focus on rural backward students

4 CHALLENGES

1. Organization of International Seminar/Conference
2. Placing the students
3. Updating latest developments in the field of computer science

10) Future Plans of the Department

Academic
1. Strengthening the Computer Science manpower
2. Introducing new teaching and research programmes
3. Establish partnership with recognized universities and Industries
4. Formulate Academic Quality Assessment cell to monitor the academic quality parameters in the department.

Placement
1. Increase Industry Institute Interaction

2. Establish MoUs with local companies

3. Provide soft-skills and stress management tips to students