Aryabhatta College

Department of Computer Science

(Annual Report for the Academic session 2017 to 2018)

1) Name of Teacher in Charge Ms. Sonal Linda

2) Brief details of Faculty members

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. Ranjan Kumar,Assistant Professor
Dr Ranjan Kumar is Associate 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 areas 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.

Ms. Sonal Linda, Assistant Professor
Ms. 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.

Mr. Gagandeep Sharma, Assistant Professor (Adhoc)
Mr. Gagandeep Sharma was Assistant Professor (Adhoc) in Department of computer science, Aryabhatta College (University of Delhi). He did his BCA in 2006 and MCA in 2009 from University of Jammu. He worked as Teaching Assistant in Computer Science Department, Bhadarwah campus, University of Jammu from 10 August 2011 to 20 February 2013. He worked as Lecturer at J.K college of Bachelor of Computer Applications, Kunjwani, Jammu from 02 August 2010 to 25 June 2011. He worked as Lecturer in Computer Science, Sacred Heart College of Management Technology from 27 October 2009 to 30 April 2010.

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)

Ms. Kanchan Arora, Assistant Professor(Adhoc)
Ms. Kanchan Arora was Assistant Professor(Adhoc) in Department of computer science, Aryabhatta College (University of Delhi). She did her Ph.D. in 2017 from University of Delhi, MCA in 2011 from GGSIPU Delhi and B.Sc. in 2008 from Bhaskaracharya college of Applied Sciences University of Delhi. She worked as Teaching Assistant in IIIT Delhi for 2 years. She worked as Assistant Professor at Manav Rachna International University. She has published four research papers in National and International Journals.

Ms. Anjali Gautama, Assistant Professor(Adhoc)
Ms.Anjali Gautama was Assistant Professor(Adhoc) in Department of computer science, Aryabhatta College (University of Delhi). She did her B.Tech.(CSE) in 2012 from Amity school of engineering and technology and M.Tech.(CSE) in 2014 from IIIT Delhi. She worked as Teaching Assistant in IIIT Delhi for 2 years. She worked as Assistant Professor(Adhoc) in Department of computer science, Ram Lal Anand College (University of Delhi) from 03 September 2013 to 30 December 2013. She worked as Assistant Professor(Adhoc) with IITM, GGSIPU, Delhi from 10 January 2012 to 3 September 2013. She has published some research papers in National and International conferences and Journals.

3) Student Strength

First Year	Second Year	Third Year
48	38	NA

4) Details of publication work by the faculty members

Ms. Sonal Linda, Assistant Professor

- Presented "A Genetic Algorithm Approach to Context aware recommendations based on Spatio-Temporal Aspects" in Second International Conference on Integrated Intelligent Computing, Communication & Security (ICIIC-2018), Organized by the Department of Computer Science and Engineering, SJB Institute of Technology, Bengaluru, Karnataka, held on 24-25 January 2018.

Mrs. Ruchika Aggarwal Assistant Professor

- "Search Based Structural Test Data Generation-A current state of Art" in International Journal of Scientific and Engineering research, 2017.
- "A peer to peer traffic identification method using K-means Clustering, SVM and Genetic Algorithm" in "International Journal of Computer Science and Mobile Computing",2017".
- "A new hybrid approach for Network Traffic Classification using SVM and Naive Bayes Algorithm" in "International Journal of Computer Science and Mobile Computing",2017".

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

Dr. Mona Adlakha, Assistant Professor

- Attended a Faculty Development Programme on *"Introduction to IoT"* at Rajdhani College organized by Rajdhani College & ICT Academy on 29th - 30th Jan. 2018.
- Participated in formulating the guidelines for various papers of BA(Programme) CBCS (Computer Science Discipline).

6) Achievement of Students including their participation in various societies

7) Co-curricular Programmes conducted by the Department

Talk on "MACHINE LEARNING"

TechPioneers started its activities for the session, with **a talk on "MACHINE LEARNING" by Dr. A.K. Bhateja, Director DFMM, DRDO**. The relationship between machine learning and computational statistics was discussed, emphasizing on prediction-making through the use of computers. Students were encouraged to explore this field for research purposes.

In-House –Skill Development Activity – A PYTHON PROGRAMMING WORKSHOP

A significant **milestone was achieved when the Department of Computer Science held the first In-House Skill Development Activity of Aryabhatta College – A PYTHON PROGRAMMING WORKSHOP. The 3-day workshop aimed to provide hands-on experience in Python Programming Language**. The students were introduced with the simplicity of Python programming language and motivated to enhance their programming skills. The workshop further increased the interest of the participants in other fields of computer science like web development, app development or any general purpose applications. A quiz was conducted at the end to test the effectiveness of the workshop. The participants also filled a feedback form at the end of the workshop.

Annual Computer Science festival of Aryabhatta College - CELESTECH'18

The **second milestone was achieved when the Department of Computer Science held the 1ˢᵗ Computer Science festival of Aryabhatta College - CELESTECH'18.** This annual Inter-college fest was organized with the objective to provide a platform for the students to showcase their talent with a competitive spirit. CELESTECH '18 held multiple technical and non-technical events on the 1ˢᵗ day. Several innovative events were organized - Quizosity: Codathan; Junkyard Wars; IT Tambola; Unicon; Lan Gaming; CHASSE au TRESORE; and the fun One minute games.

On the 2ⁿᵈ day, a talk on *"What After Graduation?"* by Dr. Anup (Managing Director at Aspen Research Services Pvt. Ltd.) was organized. An expert in career counseling, Dr. Anup motivated the students to discover themselves and achieve their goals. The talk ended with a Question hour round where students received innovative answers to their various queries.

CELECTECH '18 received overwhelming response from students of various undergraduate and graduate colleges of Delhi. It was a magnificent success.

Summer Internship Opportunities

Some students did **internship in the summer 2017 at IIC South Campus (University of Delhi), CSEC North Campus (University of Delhi) and Minacle India Pvt. Ltd. This year too students have got internship opportunities (for Summer 2018) in prestigious institutes like IISc Banglore and some industry pioneers.**

8) Library Budget sanctioned for the Department; **Rs 1,20,000/-**

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

   1 STRENGTH

1. Qualified, experienced and dedicated teaching faculty with good retention ratio.
2. Laboratories with State of the Art equipment and modern software tools.
3. Faculty contributing in design development and implementation of curriculum in Board of Studies of an Affiliating University.
4. Effective use of ICT in teaching learning process.
5. Student centric functioning with mentoring, counseling through teachers and Effective academic monitoring.
6. Safe and Secured Environment for girl students.

   2 WEAKNESSES

1. Less Industry – Institute interaction.

2. Moderate Placement ratio.
3. Institute lacks in revenue generation.
4. Less student pursuing higher education.
5. Involvement of Alumni at Institute level is less.

3 OPPORTUNITES

1. To arrange more number of FDPs /STTPS/ National Level /International Level conferences.
2. To arrange specialized Training programs by the faculty.
3. Scope for interdisciplinary and sponsored projects.
4. Scope for improvement of digital literacy amongst women.

4 CHALLENGES

1. Strengthen Industry-Institute Interaction.
2. More placements in core companies.
3. Encouraging students for competitive examinations and higher studies.
4. Networking and strengthening relationship with stakeholders.
5. More focus on Industrial training for faculty and students.
6. Girl students with varied socio- economic background.

10) Future Plans of the Department

1. The college has plans to organize national conferences every year in all departments. Every department shall come forward to undertake one major and minor research.
2. Proposals to the University to start research courses.
3. Constant awareness on discipline
4. Efforts to improve English skills.
5. Plastic free campus.