# Aryabhatta College

# Department of Computer Science

# (Annual Report for the Academic session 2019 to 2020)

- 1) Name of Teacher in Charge Dr. Sonal Linda
- 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) 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)

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. 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.

# Ms. Ranjana Jatav, Assistant Professor(Adhoc)

Ms. Ranjana Jatav, Assistant Professor(Adhoc) was Assistant Professor(Adhoc) in Department of computer science, Aryabhatta College (University of Delhi). She did her B.Sc.(H) Computer Science in 201 from Bhaskaracharyra college of applied sciences, University of Delhi and M.Sc. Computer science in 2015 from Department of computer science, University of Delhi. She worked as Assistant Professor(Adhoc) in Department of computer science, Motilal Nehru College (University of Delhi) from July 2016 to December 2017.

3) Student Strength

First Year	Second Year	Third Year
53	47	48

4) Details of publication work by the faculty members

# Dr. Priti Jagwani, Assistant Professor

Published a co-authored paper 'Dual Aspect Sentiment Analysis for Opinion Mining' in IEEE ICECCT 2019 conference.

# Dr. Anjali Gautam, Assistant Professor

Published a Journal article titled 'FS-CARS: fast and scalable context-aware news recommender system using tensor factorisation' in the International Journal of Computational Science and Engineering in 2019.

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

# Raj Kumar Sharma, Assistant Professor

• Organized a workshop 'Software Configuration Management' for the students of Stratford University, Noida campus on 20 January 2019.

#### Ms Ranjana Jatav, Assistant Professor

• Attended a two day FDP on 'Introduction to Big Data Analytics' at Shyama Prasad Mukherji College for Women.

#### 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
2019	Creative Writing Event at Annual Literature Fest of Motilal Nehru College (Evening), Delhi University	Individal	University of Delhi	Competition	Kanika Singh

7) Co-curricular Programmes conducted by the Department

#### Add-on Course

The Department of Computer Science successfully completed the Add-on courses on Microsoft MOS Certification Exam in association with ATS Pvt Ltd. A Microsoft – AEP (Authorized Education Partner) for the session 2019-2020. This course received an overwhelming response from students of different streams. Sixty one (61) students from across all courses have registered for this prestigious course in Business Analytics. The free Four Days Training session also provided to all the students from 26<sup>th</sup> to 29<sup>th</sup> May 2019, which guided the students for the on-line certification exam.

#### Seminar on Soft Skills

TechPioneers organized a seminar on "Soft Skills" on 15th October 2019. The seminar aimed to help students prepare for giving better job interviews and highlighted the importance of internships. Thirty five students from I, II and III year of B.Sc.(Hons) Computer Science participated in this workshop. The resource persons were Ms. Ashima and Ms. Akshita from "The Discovery" team. Nine (9) of these students of III year, had a follow up session with Ms. Ashima and Ms. Manju on 18<sup>th</sup> February 2020.

#### Annual Computer Science festival of Aryabhatta College - CELESTECH'20

The Department of Computer Science held its 3<sup>rd</sup> Computer Science festival - CELESTECH'20. 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 '20 held multiple technical and non-technical events. Several innovative events were organized -

Inquizitive, Codathan, Crown IT Tambola, Unicon – (LAN Gaming Competition); CHASSE au TRESORE; and the fun One Minute games and Slam Free.

CELECTECH '20 received overwhelming response from students of various undergraduate and graduate colleges of Delhi. It was a magnificent success.

#### Webinar on "Cyber Security"

TechPioneers, successfully organized a Webinar on "Cyber Security", on 4th May 2020. The speaker, Mr. Rakshit Tandon, is a renowned Cyber Security Expert.

The session saw an overwhelming response with 305 registration from students, faculty and nonteaching staff from various colleges of University of Delhi and Delhi NCR. Participants registered from different locations (Delhi, Maharashtra, Agra, Muzaffar Nagar, Amadalavalas, Indore, Haryana, Bihar, Chandigarh, Jalandhar, etc.).

A total of 105 participants participated in the webinar.

## Summer/ Winter Internship Opportunities

The first graduate batch of B.Sc(H) Computer Science has done us proud. Students are perusing Masters programs in Russia, Finland, IIM Rothak, University of Delhi and other universities of India. Few Students have been placed in TCS, Deloitte, GarudaUAV Pvt. Ltd., Deligence Technologies, etc. Students from the outgoing batch have been placed in FIS Global Business Solutions, TCS Pvt. Ltd.

Students are enhancing their skills students did internship in the summer of 2019 and 2020 with Spa Capitals, Laugh out Loud Ventures Pvt. Ltd.,, Makers Box, Things Go Social, Candid.Technology, ED Times, The Education Tree, Igniting Young Minds, Beyond Alphabet. PhD Chambers of Commerce.

- 8) Library Budget sanctioned for the Department; Rs1,30,000/-
- 9) (Strength , Weakness , Opportunities, Challenges) SWOC Analysis of the Department

## 1 STRENGTH

- 1. Strong demand for the Branch CSE
- 2. Ready for Accredited UG courses
- 3. Qualified and experienced faculty & staff members,
- 4. Strong ethics and commitment to quality, positive moral, commitment to seek opportunities
- 5. Excellent team work among faculty and students
- 6. Adequate infrastructure
- 7. Good performance of students in examination
- 8. Revised and updated choice-based credit system for curriculum of UG programme

#### 2 WEAKNESSES

- 1. Lack of Research infrastructure
- 2. No stronger relationships with R&D organizations
- 3. Enhanced R&D, consultancy
- 4. Increased revenue generation
- 5. Interdisciplinary growth across departments

#### **3 OPPORTUNITES**

Opportunity to maximize on potential of Centers of Excellence for "Data Science"
To strengthen week students academic performance through remedial classes.

#### 4 CHALLENGES

International collaboration Contribute to rural development.

#### 10) Future Plans of the Department

- 1. Strengthening center of excellence for Data Science lab.
- 2. Conducting International Conference.
- 3. Planning of FDP's