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Summary

Joined NCERT on 13 August 2013 as an Assistant Professor, and was posted with the Department of Education in Science and Mathematics (DESM). Since February 2020, I am working with the Central Institute of Educational Technology (CIET), NCERT. Prior to joining NCERT, I have worked as an Assistant Professor at the Miranda House College, University of Delhi.

Education

1. Ph.D. in Computer Science from Jamia Millia Islamia (A Central University), New Delhi in 2016. Title of the thesis “Adaptive Intelligent Tutoring System”.
2. Master’s Degree in Computer Science from Assam University, Silchar, India.
3. Bachelor’s Degree in Computer Science from Assam University, Silchar, India.

Area of Interest

My research interests include among others, Intelligent Tutoring Systems, Personalised and Adaptive Student Modeling, E-learning, Soft Computing including Data Mining and Machine Learning, wireless networks.

Highlights of Works

8 years in the development of curriculum in CS, IP, AI, and Integration of Technology in School Education and Teacher Training.

Sl. No.	Activity
1	Development of syllabi of Computer Science and Informatics Practices for grades 11 and 12 involving K-12 teachers, principals and university professors
2	Development of textbooks of Computer Science and Informatics Practices for grades 11 and 12 involving K-12 teachers, principals and university professors
3	Setting up an Open edX based MOOC course platform at NCERT (www.ncertx.in)
4	NISHTHA - Development of teacher training modules on ICT and large scale capacity building of teachers on Integration of ICT in teaching-learning involving K-12 teachers, and teacher educators

5	Resource person at various seminars/webinars/workshop/Teacher training programs for topics such as 'Open Educational Resources', 'Licensing and Creative Commons', 'Free and Open Source Software', and 'Use of ICT in Teaching and Assessment'.
6	Handling (as Technical PI) of day-to-day operation and hosting of DIKSHA platform (https://diksha.gov.in/) on Azure cloud.
7	PI of digital initiatives like Epathshala (https://epathshala.nic.in/), NROER (https://nroer.gov.in/)
8	Technical coordinator for Design and development of a portal for the National Achievement Survey.
9	PI for setting up an Open edX based MOOC platform (http://ncertx.in/) and design and development of a one year diploma course for in-service teachers.
10	Member of working group for development of Position Paper on 'Educational Technology' in Education, and 'Computational Thinking' at NCERT
11	Member of working committee for Smart India Hackathon, Toy Hackathon and Manodarpan Hackathon for development of Video Games at NCERT
12	Member, Adult Education Cell with special focus on Digital Literacy at NCERT

Major Projects (Ongoing)

- DIKSHA (<https://diksha.gov.in/>)
- National ICT Award (<https://ictaward.ncert.gov.in/>)
- NCF Tech Platform
- Epathshala (<https://epathshala.nic.in/>)

COURSES TAUGHT (Miranda House College, DU)

- Operating System
- Database Management System

SCHOLARSHIPS AND NATIONAL LEVEL ACHIEVEMENTS

- Qualified the National Eligibility Test (NET) for Teaching and Research Fellowship conducted by the University Grant Commission (UGC) of India, twice in the years 2012 (June and December).
- Junior as well as Senior research Fellow under the UGC Basic Scientific Research fellowship for meritorious students.
- Qualified the Graduate Aptitude Test in Engineering (GATE) organized by Indian Institute of Technology, India.

- Selected for the Sakura Exchange Program in Science organized by the Japan Science and Technology Agency (JST), and visited Japan in 2018 as part of a delegation of Indian Researchers and Administrators.

PROFESSIONAL TRAININGS ATTENDED (in India and Abroad)

- International Online Course on "Computational Thinking in Education the New Normal Time", Mashav-METC, Israel in 2020
- Two weeks Refresher course on Computer Science and Information Technology organized by JNU in 2019
- Three weeks Refresher course on E-Learning and Digital Learning by DU in 2017.
- Three weeks workshop on Large Scale Assessment : Analysis and Reporting in collaboration with Australian Council for Educational Research in 2016.
- International Conference on 'Devising On-line In-service Teacher Education Programmes for Quality Enhancement in School Education in India – in collaboration with Curtin University, Australia in 2016
- Three weeks orientation cum Refresher course on Research Methodology by NCERT in 2013.

PUBLICATIONS (<https://scholar.google.com/citations?user=99g8GI8AAAAJ&hl=en>)

1. Ahmad, Naeem, Md Gulzarul Hasan, and Rejaul Karim Barbhuiya. "Identification and prioritization of strategies to tackle COVID-19 outbreak: A group-BWM based MCDM approach." *Applied soft computing* (2021): 107642. <https://doi.org/10.1016/j.asoc.2021.107642>
2. Barbhuiya, Rejaul Karim, and Naeem Ahmad. "IoT applications in translational bioinformatics." *Translational Bioinformatics in Healthcare and Medicine*. Academic Press, 2021. 69-79. <https://doi.org/10.1016/B978-0-323-89824-9.00006-9>
3. Barbhuiya, Rejaul Karim, and Srivastava, Ashish Kumar. "Immersive ICT Tools for Teaching and Learning Science." *School Science* 54(2) (2016), pages 13-17. <https://ncert.nic.in/pdf/publication/journalsandperiodicals/schoolscience/School%20Science-%20June-sept-2016.pdf>.
4. Barbhuiya, Rejaul Karim, Khurram Mustafa, and Suraiya Jabin. "A personalized learning system with adaptive content presentation and affective evaluation facilities." *International Journal of Computer Applications* 70.26 (2013).
5. Barbhuiya, Rejaul Karim, Khurram Mustafa, and Suraiya Jabin. "Design specifications for a generic Intelligent Tutoring System." *Proceedings of the International Conference on e-Learning, e-Business, Enterprise Information Systems, and e-Government (EEE)*. The

Steering Committee of The World Congress in Computer Science, Computer Engineering and Applied Computing (WorldComp), 2011.

- Barbhuiya, Rejaul Karim, Khurram Mustafa, and Suraiya Jabin. "Design Perspectives of Intelligent Tutoring System." Proceedings of the Fifth Indian International Conference on Artificial Intelligence (IICA). 2011.

PUBLICATIONS AT NCERT

- Computer Science - a textbook for class 11*, Publisher: NCERT, ISBN: 978-93-5292-117-1, URL: <https://ncert.nic.in/textbook.php?kecs1=0-11>, Year : 2019.
- Computer Science - a textbook for class 12*, Publisher: NCERT, ISBN: 978-93-5292-338-0, URL: <https://ncert.nic.in/textbook.php?lecs1=0-13>, Year : 2020.
- Informatics Practices - a textbook for class 11*, Publisher: NCERT, ISBN: 978-93-5292-148-5, URL: <https://ncert.nic.in/textbook.php?keip1=0-8>, Year : 2019.
- Informatics Practices - a textbook for class 12*, Publisher: NCERT, ISBN: 978-93-5292-361-8, URL: <https://ncert.nic.in/textbook.php?leip1=0-7>, Year : 2020.
- National Achievement Survey (NAS)- National Report to Inform Policy, Practices and Teaching-Learning*, in collaboration with Ministry of Education, Govt. of India and UNICEF, Publisher: NCERT, ISBN: 978-93-5292-299-4, URL: https://ncert.nic.in/pdf/NAS/WithReleaseDate_NPPTL.pdf, Year : 2019.
- Pragyata: a Guideline for Digital Education*, Published by the Department of School Education & Literacy, Ministry of Education, Government of India, 2020.
- Be Safe in Cyber World - Do's and Don'ts for Teachers, CIET-NCERT, URL: https://ciet.nic.in/upload/Cyber_safety_for_teachers_new.pdf
- Be Safe in Cyber World - Do's and Don'ts for Students, CIET-NCERT, URL: https://ciet.nic.in/upload/Cyber_safety_for_Students_new.pdf
- Alternative Academic Calendar for the Primary Stage (2021-22), https://ncert.nic.in/pdf/English_AAC_Eight_Week_Primary_Stage.pdf (English), https://ncert.nic.in/pdf/Hindi_AAC_Eight_Week_Primary_Stage.pdf (Hindi)

Invited Lecture/Talk/Workshop Session

Sl. No.	Role and Program	Topic	Institution	Date
1	Resource person for short term course on MOOCs	i) Open Learning Platform-overview, and ii) NCERT as a Case study for Online teaching	HRDC, AMU	24 Feb – 01 March 2020

2	External Examiner for B.Sc.	DBMS	Department of CS, AMU	28 Dec 2015
3	4-days hands-on training programme	Python		16-19 Jan 2019
4	Recourse Person for one week FDP 'Flipped Learning: Art of effective Teaching'	Effective Internet Searching and Copyright Issues	Guru Nanak College of Education GGSIP University, Delhi	5-11 May, 2018

ADDITIONAL INFORMATION

Technologies/Frameworks: I have experience of working in Python, Pandas and Numpy, and basic knowledge of Tensorflow.

NATURAL LANGUAGE KNOWN

- Can Read and Write: English, Hindi, Bengali, Assamese, Arabic
- Can Comprehend and Communicate fluently: English, Hindi, Bengali

Office Address

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