


SHYAM LAL COLLEGE (EVE.)

UNIVERSITY OF DELHI

Faculty Proforma



Title	Mr.	First Name	Rajiv Ranjan	Last Name	Singh	
Designation		Assistant Professor				
Address		Department of Computer Science Shyam Lal College (Evening) (University of Delhi) G T Road, Shahdara Delhi – 110032				
Phone No	Office					
	Residence					
	Mobile	+91-9810658948				
Email		rrsingh@shyamlale.du.ac.in , R.R.Singh@cs.bham.ac.uk				
Web-Page		http://people.du.ac.in/~rrsingh/				
Educational Qualifications						
Degree		Institution			Year	
Doctor of Philosophy		University of Birmingham, Birmingham UK			2016- Pursuing	
M.Sc. Computer Security		University of Birmingham, Birmingham UK			2013	
M.Phil.(Computer Science)		JRN Rajasthan Vidyapeeth, Udaipur India			2007	
Master of Computer Applications		IGNOU, Delhi, India			2002	
Post Graduate Diploma in Computer Applications		University of Delhi, Delhi, India			1997	
B.Sc.(Hons.) Electronics		University of Delhi, Delhi, India			1996	
Career Profile						
<ul style="list-style-type: none"> • Assistant Professor with Department of Computer Science, Shyam Lal College (Eve) (University of Delhi) since January 2009. • Worked as Programmer with Department of Computer Science, Keshav Mahavidyalaya (University of Delhi) from August 2005 to January 2009. • Worked as Lecturer in Information Technology with Vivekananda Institute of Professional Studies (affiliated to GGSIP University) between July 2003 and July 2004. • Worked as Lecturer in Computer Science at Acharya Narendra Dev College (University of Delhi), Kalkaji from October 2002 till end of academic session. 						

- Worked as **Scientific Assistant (Network Administrator)** with Department of Computer Science, Keshav Mahavidyalaya (University of Delhi) from July 1997 to October 2002.

Administrative Assignments

- **ICT Coordinator**, Shyam Lal College (Eve), University of Delhi to facilitate implementation of facilities / resources provide by University of Delhi through Delhi University Computer Center (DUCC) till Feb 2021.
- **Teacher in charge**, Department of Computer Science, Shyam Lal College (Eve), University of Delhi in academic session 2010-11, 2012-13 and 2014-15, 2021-22.
- **Convenor**, PF and Investment Committee, Shyam Lal College (Eve), University of Delhi in academic session 2021-22.
- **Member**, Computer, Software and Website Committee, Shyam Lal College (Eve.), University of Delhi in 2010-11, 2011-12,2020-2021 and 2021-22.
- **Convenor**, Computer, Software and website Committee, Shyam Lal College (Evening) (University of Delhi) during academic session 2009-10, 2013-14, 2014-15.
- **Coordinator**, BBS Programme, Keshav Mahavidyalaya (University of Delhi) during academic session 2007-08.
- **Coordinator**, Placement Cell, Keshav Mahavidyalaya (University of Delhi) during academic session 2006-07, 2007-08 and 2008-09.
- **Coordinator**, e-Quiz Development with Institute of Life Long Learning (ILLL), University of Delhi for e-content development in 2009-10.
- **Author**, e-Quiz Development with Institute of Life Long Learning (ILLL), University of Delhi for e-content development in 2009-10.
- **Member**, College Development Committee, Disciplinary Resource Committee, Internal Assessment Committee, BA Programme Committee , Shyam Lal College (Evening) (University of Delhi) during academic session 2009-10.

- **Convenor**, College Development Committee, Timetable Committee, Shyam Lal College (Evening) (University of Delhi) during academic session 2010-11 and 2011-12.
- **Member**, Admission Committee, Computer Software and Website Committee, Internal Assessment Committee, BA Programme Committee, Shyam Lal College (Evening) (University of Delhi) during academic session 2010-11 and 2011-12.
- **Convenor**, College Development Committee, Shyam Lal College (Eve.), University of Delhi in 2010-11 and 2011-12.
- **Convenor**, College Timetable Committee, Shyam Lal College (Eve.), University of Delhi in 2010-11 and 2011-12.

Areas of Interest / Specialization

- Network and Information Security
- Protocol Modelling and Verification
- E-Governance and Data Privacy

Subjects Taught

- Information Security
- IT Fundamentals
- Database Management Systems
- Computer Networks
- Operating Systems
- Visual Programming
- Programming in Python
- Computer Architecture and Organisation

Research Guidance

Publications Profile

Publications

Journals

- Chothia, T., Novakovic, C. and Singh, R.R., 2015. Calculating Quantitative Integrity and Secrecy for Imperative Programs. *International Journal of Secure Software Engineering (IJSSE)*, 6(2), pp.23-46.
- Ritu, K., Singh, R.R. and Kumar, B. (2015). Comparative Analysis of Recall-based (Drawmetric) and Click-based (Locimetric) Graphical Password Authentication Schemes. *International Journal of Computer Science and Information Technologies (IJCSIT)*, 6(2), pp.1573–1577.
- Agarwal, R., Arora, K. and Singh, R.R., 2014. Comparing various black hole attack prevention mechanisms in MANETs. *International Journal of Emerging Technology and Advanced Engineering*, 4(4), pp.157-166.

Conference Papers

- Singh, R.R., Moreira, J., Chothia, T. and Ryan, M.D., 2020, September. Modelling of 802.11 4-way handshake attacks and analysis of security properties. In *International Workshop on Security and Trust Management* (pp. 3-21). Springer, Cham.
- Chothia, T., Novakovic, C. and Singh, R.R., 2014. Automatically calculating quantitative integrity measures for imperative programs. In *Data Privacy Management, Autonomous Spontaneous Security, and Security Assurance* (pp. 250-265). Springer, Cham.

Book Chapters

- Contributed a Unit in **IGNOU** Study material for **BCA** students on “**Operating Systems**” in Sep 2011.
- Contributed a Unit in **IGNOU** Study material for **PG Diploma in Information Security** on “*Need for Business Continuity Program*” in Aug 2011.
- Contributed a Unit in **IGNOU** Study material for **PG Diploma in Information Security** on “*Security Awareness*” in Aug 2011.

Conference Organization/ Presentations

- Presented the paper “**Modelling of 802.11 4-way handshake attacks and analysis of security properties**” co-authored with Jose Moreira, Tom Chothia, and Mark Ryan,” in the

International Workshop on Security and Trust Management, Co-located with ESORICS 2020, at Guildford UK on 17th September 2020. (<https://hosting.services.iit.cnr.it/stm2020/>)

- Invited speaker on the topic “Quantification of Security” in the Nation Conference on Cyber Security (NNCS-2014) organized by RDIAS, GGSIPU.
- Co-Coordinator of UGC workshop for faculty members on “**Usages of ICT in Teaching**” at CPDHE(UGC-HRDC) University of Delhi in September 2015.
- Member, Organising Committee of **International Conference on Big Data Analytics 2012 (BDA-2012)** jointly organised by University of Delhi and University of Aizu Japan. Dec 2012 at IIC New Delhi
- Member of the panel in the panel discussion on “**Cloud Computing and e-Governance**” organised by Governance Now held on 23rd March 2012 at Noida.
- Coordinator, **International Conference on Human Rights in 21st Century**” organised by Shyam Lal College (Eve) University of Delhi. Feb 2012 at IIC New Delhi
- **Delivered a talk** for two sessions on “**Engaging students using ICT-Technology as Enabler**” in Orientation Programme (OR-68) for university/college faculty members conducted by **UGC-Academic Staff College** of Delhi University (CPDHE) in Nov 2011.
- **Delivered a talk** for two sessions on “**Leveraging ICT technology for Empowering Educators**” in Orientation Programme (OR-63) for university/college faculty members conducted by **UGC-Academic Staff College** of Delhi University (CPDHE) in July 2011.
- **Delivered a talk** for two sessions on “**Empowering Learning process through ICT**” in Orientation Programme (OR-63) for university/college faculty members conducted by **UGC-Academic Staff College** of Delhi University (CPDHE) in March 2011.
- **Delivered a talk** for two sessions on “**Empowering Learning process through ICT**” in Orientation Programme (OR-63) for university/college faculty members conducted by **UGC-Academic Staff College** of Delhi University (CPDHE) in July 2010.

<ul style="list-style-type: none"> - Delivered a talk for two sessions on “Open Source Utility software for Educators” in Orientation Programme (OR-63) for university/college faculty members conducted by UGC-Academic Staff College of Delhi University (CPDHE) in July 2010. - Resource person for ICT training Programme for college teachers conducted by Institute of Lifelong Learning (ILL), University of Delhi in many colleges of University of Delhi. (SGTB Khalsa College, Shyam Lal College (M and E), IP College for Women, Kalindi College, Keshav Mahavidyalaya, Deen Dayal Upadhyaya College, Sri Aurobindo College, Shaheed Bhagat Singh College (Eve) etc.
Research Projects (Major Grants/Research Collaboration)
Awards and Distinctions
<ul style="list-style-type: none"> - Awarded Fully Funded PhD scholarship from School of Computer Science, University of Birmingham in 2016. - “Winner of the 2016 Research Skills award” for the conference presentation. Voted as best speaker among all first-year PhD scholars at School of Computer Science, University of Birmingham. - Selected by University of Delhi to pursue MSc (Computer Security) from University of Birmingham, UK in 2012 under its fully sponsored Faculty Training Program (FTP) -2012
Association With Professional Bodies
<ul style="list-style-type: none"> - Data Security Council of India
Other Activities



Signature of Faculty Member