# **CENTRAL UNIVERSITY OF JAMMU**

## **FACULTY PROFILE**

Name	Zakir Ahmad Sheikh	
Title & Designation	Assistant Professor,	
	Department of Computer Science and	
	Information Technology,	
	Central University of Jammu	
	Rahya-Suchani (Bagla), District Samba, Pincode -	
	181143, Jammu & Kashmir (J&K), India	
Residence Address	Turigam Devbugh, Yaripora Kulgam, Jammu and	
	Kashmir - 192232	
Mobile Number	6005932742	
Residence Phone No		
Email	zakir.csit@cujammu.ac.in	
Educational Qualifications:		
Degree	Institution	Year
Ph. D.	Central University of Jammu	Pursuing
M. Tech.	Central University of Jammu	2020
B. Tech.	Mewar University	2017
Competitive Exams:		
Exam	Subject	Year
UGC-NET	Computer Science and Applications	2022
GATE	Computer Science and Information Technology	2020
	(CS)	
Areas of Interest / Specialization:		
Cyber Security, Security of Cyber Physical Systems, Artificial Intelligence, Programming, Internet of Things,		
Computer Networks, Algorithms and Data Structures, Database Management System, Operating System		
Career Profile:		
Designation	Institute/Organization	Period
Assistant Professor	Central University of Jammu	November 2023 onwards
Junior Research	Central University of Jammu	July 2021 – May 2023
Fellow		
Software Developer	Think and Win Technologies	January 2018 – July 2018
and Trainer		
Software Developer	EMax Technologies Private Limited	July 2017 – January 2018
Subjects/Topics Taught:		
Cyber Physical System	S	
Data Structures		
Computer Networks		
C Programming		
Java Programming		
Web Development		

#### **Research Guidance:**

Mentored many M. Tech. students in Dissertation

#### **Publications Profile:**

## a. Research Papers in Journals

- 1. Sheikh, Z. A.; Singh, Y.; Singh, P. K.; & Ghafoor, K. Z. (2022). Intelligent and secure framework for critical infrastructure (CPS): Current trends, challenges, and future scope. *Computer Communications*, 193, 302-331. https://doi.org/10.1016/j.comcom.2022.07.007 (IF 6.0)
- 2. Sheikh, Z. A.; Singh, Y.; Singh, P. K.; & Gonçalves, P. J. S. (2023). Defending the Defender: Adversarial Learning Based Defending Strategy for Learning Based Security Methods in Cyber-Physical Systems (CPS). Sensors, MDPI. 23(12), 1-19. <a href="https://doi.org/10.3390/s23125459">https://doi.org/10.3390/s23125459</a> (IF 3.9)
- 3. Sheikh, Z. A.; Singh, Y.; Tanwar, S.; Sharma, R.; Turcanu, F. E.; & Raboaca, M. S. (2022). EISM-CPS: An Enhanced Intelligent Security Methodology for Cyber-Physical Systems through Hyper-Parameter Optimization. *Mathematics, MDPI*. 11, 189-205. <a href="https://www.mdpi.com/2227-7390/11/1/189">https://www.mdpi.com/2227-7390/11/1/189</a> (IF 2.592)
- 4. Ahad. U.: Singh, Y.: Anand. P.: Sheikh, Z. A.: & Singh, P. K. (2022). Intrusion Detection System Model for IoT Networks Using Ensemble Learning. *Journal of Interconnection Networks*, 2145008. <a href="https://doi.org/10.1142/S0219265921450080">https://doi.org/10.1142/S0219265921450080</a> (IF 0.459)

## b. Research Papers in Conferences

- 1. Sheikh, Z. A.: & Singh. Y. (2022). A Hybrid Threat Assessment Model for Security of Cyber Physical Systems. Seventh International Conference on Parallel, Distributed and Grid Computing (PDGC).IEEE. 10.0.4.85/PDGC56933.2022.10053332
- 2. Sheikh. Z. A., & Singh. Y. (2021). Lightweight de-authentication DoS Attack detection methodology for 802.11 networks using sniffer. In *Proceedinas of second international conference on computina, communications, and cyber-security* (pp. 67-80). Springer, Singapore. <a href="https://doi.org/10.1007/978-981-16-0733-2">https://doi.org/10.1007/978-981-16-0733-2</a> 5
- 3. Akshita. Singh, Y., & Sheikh, Z. A. (2022). On efficient and secure multi-access edge computing for internet of things. In *Proceedinas of Third International Conference on Computina, Communications, and Cyber-Security* (pp. 299-310). Springer, Singapore. <a href="https://doi.org/10.1007/978-981-19-1142-2">https://doi.org/10.1007/978-981-19-1142-2</a> 23
- 4. Muzafar, R., Singh, Y., Anand, P., & Sheikh, Z. A. (2022). Review on Security of Internet of Things: Security Requirements. Threats, and Proposed Solutions. In *Emeraina Technologies for Computina, Communication and Smart Cities* (pp. 747-756). Springer, Singapore. <a href="https://doi.org/10.1007/978-981-19-0284-0">https://doi.org/10.1007/978-981-19-0284-0</a> 54
- 5. Jabeen, R., Sheikh, Z. A., & Singh, Y. (2022). "Machine Learning for Security of Cyber-Physical Systems and Security of Machine Learning: Attacks, Defences, and Current Approaches", *International Conference on Recent Innovations in Computina (ICRIC) INDO-Hungry 2022*, volume 2. Springer, Singapore. https://doi.org/10.1007/978-981-99-0601-7 62

#### c. Book Chapters

1. Sheikh, Z. A., & Singh, Y. (2022). Minimizing Cost, Effort, and Implementation Complexity for Adopting Security Requirements in an Agile Development Process for Cyber-Physical Systems. *Agile Software Development: Trends, Challenges and Applications*. Scrivener Publishing LLC. <a href="https://doi.org/10.1002/9781119896838.ch6">https://doi.org/10.1002/9781119896838.ch6</a>

#### Patent:

1. Jain, S.; Singh, Y.; Sheikh, Z. A.; & Sharma, Ashok. (January, 2023). IOT-PHG: Internet of Things Based Safety Device for Protection Against Hazardous Gases. (National Patent)(Filed).

#### **Awards and Distinctions:**

- 1. **PMSSS for Pursuing B. Tech.** Received Prime Minister's Special Scholarship Scheme for pursuing B. Tech. degree.
- First Rank in B. Tech. Secured highest marks for all the four years of B. Tech. in the department of Computer Science and Engineering (CSE), Mewar University, Rajasthan (Batch 2013-2017)
- 3. **Best Reviewer Award.** Honored with the best reviewer award in the 6<sup>th</sup> International Conference

- on Recent Innovations in Computing (ICRIC-2023) organized by Department of Computer Science and IT, Central University of Jammu.
- 4. **Third Position in Programming Competition.** Achieved 3<sup>rd</sup> position in University level programming competition (C for Denis) at Mewar University Rajasthan.

## **Resource Person:**

1. One week FDP/Workshop on "Recent Trends in Security: IoT, Blockchain, and Cyber Security (RTS-2022)" held during 19th-23rd September 2022, organized by Department of Computer Science and IT, Central University of Jammu, India.

## **Conference Session Chair:**

1. Seventh International Conference on Parallel, Distributed and Grid Computing (PDGC-2022), IEEE, held during 25th-27th November 2022, organized by Department of Computer Science and Engineering, Jaypee University of Information Technology, Himachal Pradesh, India.

### **Reviewer:**

1. Reviewed a Cyber Security related paper in September 2022 for the Journal namely "Bulletin of Electrical Engineering and Informatics (BEEI)", Institute of Advanced Engineering and Science (IAES). (Scopus Indexed)

## Conferences/Workshops/FDPs:

- 1. Attended International Conference in Recent Innovations in Computing (ICRIC-2023) at Central University of Jammu on 26-27 October, 2023.
- 2. Attended International Conference in Recent Innovations in Computing (ICRIC-2022) (Indo-Hungarian Conference), Volume 2 at Central University of Jammu on 13-14 August, 2022.
- 3. Attended International Conference in Recent Innovations in Computing (ICRIC-2022), Volume 1 at Central University of Jammu on 16-17 May, 2022.
- 4. Attended International Conference in Recent Innovations in Computing (ICRIC-2019) at Central University of Jammu on 08-09 March, 2019.
- 5. Attended National Conference of Material Sciences (NCMS-2014) at Mewar University, Rajasthan on 17-18 October, 2014.
- 6. Attended Microsoft Al Classroom Series at Microsoft on 01 April, 2021.
- 7. Attended One Day Cyber Forensics Workshop at Indian Institute of Technology (IIT) Jammu, India on 10 February, 2023.
- 8. Attended 1st National Level Research Conclave at Institute of Technology, Nirma University, Ahmedabad, India on 19-20 December, 2022.
- 9. Attended Webinar on The Art of Drone Technologies at Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM), New Delhi, India on 12 March, 2022.
- 10. Attended Recent Trends in Security: IoT, Blockchain, and Cyber Security (RTS-2022) at Central University of Jammu, India on 19-23 September, 2022.
- 11. Attended FDP on Artificial Intelligence at Central University of Jammu, India on 18-22 November, 2019.
- 12. Attended FDP on Internet of Things (IoT) at Central University of Jammu, India on 14-18 October, 2019.
- 13. Attended Workshop on Android Technology at Mewar University, Rajasthan, India on 11-12 December, 2013.

## Internships/Trainings:

- 1. Completed an internship in Advanced Java at Rooman Technologies, Bangalore, from January 2017 to June 2017.
- 2. Engaged in Android Application Development training at KVCH-IBM Business Partner, Delhi, from June 2016 to July 2016.
- 3. Undertook Project Training in Java at Aptech, Srinagar, from June 2015 to July 2015.

15 December 2023 Zakir Ahmad Sheikh