

CURRICULUM VITAE

MANDEEP KAUR

Permanent address:-

Mandeep Kaur

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Career Objective:

To work in a challenging environment while being resourceful, innovative that will provide opportunities for learning and growth.

Professional Qualification:

- Ph.D. from Lovely Professional University, Jalandhar in 2021.
- M. Tech in CSE from Doaba group of Colleges Kharar (PTU) with 79 % marks in 2015.
- B.Tech in Computer science engineering from GGS CMT KHARAR (PTU) with 80% Marks in 2011.
- Senior Secondary Education (+2) from GSS SCHOOL NURPUR BEDI (PSEB) with 65% Marks in 2007.
- Matriculation from GGSS SCHOOL TAKHATGARH (PSEB) with 78% marks in 2005.

Key Skills:

- C/C++
- Java
- Python
- Microsoft Visual Studio 2008
- Html Basics, Javascript, CSS
- MS Office

Work Experience:

- Worked as Lecturer in Global College of Engineering and Technology, Kahnpur Khui (Anandpur Sahib), Punjab, India from year 2011 to 2012.
- Worked as Lecturer in SBSS Memorial Govt. College (Girls), Guru Ka Khuh (Munne), Nurpur Bedi (Anandpur Sahib), Punjab, India from August 2012 to August 2021.
- Worked as Assistant Professor in Chandigarh University, Gharuan, Punjab, India from August 2021 to February 2022.

Personal Data:

Date of Birth: 06 sep1990

Gender: Female

Nationality: Indian

*Languages: English, Hindi,
Punjabi*

Marital Status: Married

- Currently working as Assistant Professor in Chitkara University, Rajpura, Punjab India since March 2022.

Hobbies:

- Internet surfing.
- Dancing, listening soft music.
- Reading novels and journals.
- Interacting with people and making new friends.

Strengths:

- Ability to learn fast.
- Team Player, Flexible, Trustworthy, Optimistic, Confident.
- Good Team worker.
- I can adjust in any working environment.

Declaration

The information I have provided is true to the best of my knowledge and belief.

Mandeep Kaur

List of Publications:

– International Journals(SCI/SCOPUS/UGC)

1. Kaur, M., & Aron, R. (2021). FOCALB: Fog Computing Architecture of Load Balancing for Scientific Workflow Applications. *Journal of Grid Computing*, 19(4), 1-22.
2. Kaur, M., & Aron, R. (2021). A systematic study of load balancing approaches in the fog computing environment. *The Journal of Supercomputing*, 1-46.
3. Kaur, Mandeep, and Rajni Aron. "A Novel Load Balancing Technique for Smart Application in a Fog Computing Environment." *International Journal of Grid and High Performance Computing (IJGHPC)* 14.1 (2022): 1-19.
4. Kaur, Mandeep, and Rajni Aron. "An Energy-Efficient Load Balancing Approach for Scientific Workflows in Fog Computing." *Wireless Personal Communications* (2022): 1-25.
5. Rajni, Heena Wadhwa Mandeep Kaur. "The Fog computing approach for the Internet of Things." (2018).

– International Conferences

1. Saroa, M. K., & Aron, R. (2018, December). Fog computing and its role in development of smart applications. In *2018 IEEE Intl Conf on Parallel Distributed Processing with Applications, Ubiquitous Computing Communications, Big Data Cloud Computing, Social Computing Networking, Sustainable Computing Communications (ISPA/IUCC/BDCloud/SocialCom/SustainCom)* (pp. 1120-1127). IEEE.
2. Kaur, M., & Aron, R. (2020). Equal Distribution Based Load Balancing Technique for Fog-Based Cloud Computing. In *International Conference on Artificial Intelligence: Advances and Applications 2019* (pp. 189-198). Springer, Singapore.
3. Kaur, Mandeep, and Rajni Aron. "An Energy-Efficient Load Balancing Approach for Fog Environment Using Scientific Workflow Applications." *Distributed Computing and Optimization Techniques: Select Proceedings of ICDCOT 2021*. Singapore: Springer Nature Singapore, 2022. 165-174.
4. Kaur, Mandeep, and Rajni Aron. "Fog clustering-based architecture for load balancing in scientific workflows." *Proceedings of International Conference on Computational Intelligence and Data Engineering: ICCIDE 2021*. Singapore: Springer Nature Singapore, 2022.
5. Kaur, Mandeep, et al. "CNN-based Smart Waste Management System in Fog Computing Environment." *2023 IEEE 12th International Conference on Communication Systems and Network Technologies (CSNT)*. IEEE, 2023.
6. Kaur, Mandeep, and Sidhant Sharma. "Exploring the Core Components of Cloud Computing and Its Architecture." *2023 14th International Conference on Computing Communication and Networking Technologies (ICCCNT)*. IEEE, 2023.
7. Kaur, Mandeep, Rajni Aron, and Shriya Seth. "SACF: An Innovative and Secure Architectural Approach for Cybersecurity using Fog Computing Environments." *2023 9th International Conference on Signal Processing and Communication (ICSC)*. IEEE, 2023.

8. Wadhwa, Heena, et al. "Analysis of IoT devices data using bayesian learning on fog computing." Artificial Intelligence, Blockchain, Computing and Security Volume 2. CRC Press, 2024. 194-199.
9. Kaur, Mandeep, Rajni Aron, and Shriya Seth. "Optimizing Resource Allocation for Energy Efficiency in Fog Cloud Computing Environments." 2024 IEEE 13th International Conference on Communication Systems and Network Technologies (CSNT). IEEE, 2024.
10. Kaur, Mandeep, and Rajni Aron. "Connecting Cities: IoST Innovation for Smarter Cities." 2024 International Conference on Recent Innovation in Smart and Sustainable Technology (ICRISST). IEEE, 2024.

– Book Chapters:

1. Kaur, Mandeep, et al. "A Comprehensive Exploration of Machine Learning and IoT Applications for Transforming Water Management." In Innovations in Machine Learning and IoT for Water Management. IGI Global, 2024. pp. 25–50.
2. Kaur, Mandeep, et al. "Resource Allocation Using a Hybrid Evolutionary Model and Machine Learning." In Cloud and Fog Optimization-based Solutions for Sustainable Developments. IGI Global, 2024. pp. 217–241.
3. Tandon, Righa, et al. "Management of Metropolitan Mobility for Public Transport and Smart Vehicles with Fog Computing." In Cloud and Fog Optimization-based Solutions for Sustainable Developments. IGI Global, 2024. pp. 48–76.
4. Sandhu, Ramandeep, et al. "An Introduction to Generative AI Tools for Education 2030." In Integrating Generative AI in Education to Achieve Sustainable Development Goals. IGI Global, 2024.
5. Wadhwa, Heena, et al. "The Fusion of Fog Computing and Intelligent Technologies for Parkinson's Disease Care." In Intelligent Technologies and Parkinson's Disease: Prediction and Diagnosis. Springer, 2024.

List of Patents:

1. System and method for detection of brain tumor
2. Blockchain based automated auditing system for data integrity and verification
3. Crop yield protection system and method thereof
4. Heterogeneous data storage management with deduplication
5. System for face recognition and validation during the examination
6. Booking of ambulance under emergency medical services
7. System and method for monitoring crop and livestock
8. Cover Glass for Protecting Materials
9. Smart and Intelligent Scarecrow (SIS) Design No: 388314-001)

10. An IoT enabled edge computing power management system for a power grid and method thereof
11. Anti-Theft system based on the Internet of Things (IoT) to monitor unusual movements
12. A Smart Waste Management System And A Method For Using The Same
13. An autonomous and agile traffic management system (UIPCON230725-1589)
14. Tiffin Box Cover with combination lock (Design No: 411265-001)
15. Hexagonal Podium (DIPCON230919-1452)