

## Profile Page



Name : Dr Amritpal Singh

Designation : Assistant Professor Grade-i

Department : Computer Science & Engg.

Qualification : PhD Probabilistic Data Structures (Thapar Institute of Engineering and Technology, Patiala, Punjab)  
ME Software Engineering (Thapar Institute of Engineering and Technology, Patiala, Punjab)  
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### Research Interests :

Machine Learning and Data Mining; Probabilistic Data Structures; Data Analysis; Big Data;  
Internet of Things; Nature Inspired Algorithms

### Other Profile Links :

#### Google Scholar Link :

Amritpal Singh [Click Here](#)

#### Personal Web Link :

VIDWAN PROFILE URL [Click Here](#)

### Journal Publications :

Year	Journal	Publication
2021	IEEE Transactions on Sustainable Computing	Kumar, Mohit, Avadh Kishor, Jemal Abawajy, Prabal Agarwal, Amritpal Singh, and Albert Zomaya. "ARPS: An autonomic resource provisioning and scheduling framework for cloud platforms."
2020	IEEE Transactions on Industrial Informatics	Singh, Amritpal, et al. "BloomStore: dynamic bloom-filter-based secure rule-space management scheme in SDN."
2019	Computing and Informatics, Slovak Academy of Sciences- SCIE Indexed (IF:0.504)	Amritpal Singh and Shalini Batra, "FingerPrint Based Duplicate Detection in Streamed Data,"

2019	Future Generation Computer Systems, Elsevier- SCIE Indexed (IF: 4.63), doi: <a href="https://doi.org/10.1016/j.future.2017.09.072">https://doi.org/10.1016/j.future.2017.09.072</a> .	A. Singh, S. Garg, S. Batra, and N. Kumar, "Probabilistic data structure-based community detection and storage scheme in online social networks,"
2019	Knowledge-Based Systems, SCI, (IF-5.10)	Amritpal Singh, Sahil Garg, Ravneet Kaur, Shalini Batra, Neeraj Kumar, and Albert Y. Zomaya. "Probabilistic data structures for big data analytics: A comprehensive review."
2019	IEEE Network SCIE Indexed (IF: 7.503) 33, Volume no. 2 (2019): Pages (72-81).	Sahil Garg, Amritpal Singh, Kuljeet Kaur, Gagangeet Singh Aujla, Shalini Batra, Neeraj Kumar, and Mohammad S. Obaidat. "Edge Computing-Based Security Framework for Big Data Analytics in VANETs."
2019	IEEE Network, SCIE Indexed (IF: 7.2),	Sahil Garg, Amritpal Singh, Kuljeet Kaur, Gagangeet Singh Aujla, Shalini Batra, Neeraj Kumar, Mohammad S Obaidat, "Edge Computing-Based Security Framework for Big Data Analytics in VANETs"
2018	Computing and Informatics, Slovak Academy of Sciences- SCIE Indexed (IF:0.504)	Amritpal Singh and Shalini Batra, "Streamed data analysis using adaptable bloom Filter,"
2018	Future Generation Computer Systems, Elsevier- SCIE Indexed (IF: 4.63), doi: <a href="https://doi.org/10.1016/j.future.2017.09.072">https://doi.org/10.1016/j.future.2017.09.072</a> .	Amritpal Singh and Shalini Batra, "Ensemble based Spam Detection in Social IoT using Probabilistic Data Structures,"
2018	Future Generation Computer Systems, Elsevier- SCIE Indexed (IF: 4.63), doi: <a href="https://doi.org/10.1016/j.future.2017.09.072">https://doi.org/10.1016/j.future.2017.09.072</a> .	Amritpal Singh, Sahil Garg, Shalini Batra, Neeraj Kumar, and Joel J.P.C. Rodrigues, \Bloom Filter based Optimization Scheme for Massive Data Handling in IoT Environment (ABF),"
2018	IEEE Transactions on Industrial Informatics, SCI, (IF-7.3)	Amritpal Singh, Sahil Garg, Kuljeet Kaur, Shalini Batra, Neeraj Kumar, and Kim-Kwang Raymond Choo. "Fuzzy-folded Bloom Filter-as-a-Service for Big Data Storage on Cloud."
2018	IEEE Internet of Things Journal, SCIE Indexed (IF: 7.596),	Punnet kumar, Amritpal Singh, Sahil Garg, Shalini Batra, Neeraj Kumar and Ilsun You, \Multi Verse Optimizer (MVO) Algorithm for Optimal Path Planning for Two-Dimensional UAV,"
2018	IEEE Network, SCIE Indexed (IF: 7.2),	Sahil Garg, Amritpal Singh, Shalini Batra, Neeraj Kumar and Laurence T. Yang, "UAVs- Empowered Edge Computing Environment for Cyber-Threat Detection in Smart Vehicles,"
2015	Procedia Computer Science, Volume 70, 2015, Pages 499-507, ISSN 1877-0509, <a href="http://dx.doi.org/10.1016/j.procs.2015.10.091">http://dx.doi.org/10.1016/j.procs.2015.10.091</a> .	Diksha Nagpal, Sumit Kaur, Shruti Gujral, Amritpal Singh, \FR: A Recommender for Finding Faculty Based on CF Technique"
2015	International Journal of Innovations in Engineering and Technology, Vol 5 Issue 2,	Atul Kumar, Sumit Kaur, Amritpal Singh , \Heuristic Approach for Recommending Re- search Articles Using Collaborative Tagging"
2015	International Journal of Innovations in Engineering and Technology, Vol 5 Issue 2,	Gurbinder Kaur, Vijay Kumar, Amritpal Singh , \Content Based Recommender Sys- tem for Map Routing",
2015	International Journal of Innovations in Engineering and Technology, Vol 5 Issue 2	Harpreet Kaur, Maninder Singh, Amritpal Singh , \Analysis and Design of Hybrid Online Movie Recommender System",

2013	International Journal Of Soft Computing And Engineering	Amritpal Singh, Shalini Batra, \A short survey of Advantages and Applications of Skip graphs"
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## Conference Publications :

Year	Conference	Publication
2021	ISTAMCE-2021	Harsha Verma, and Amritpal Singh, "A Survey on Probabilistic Data Structure in Smart Cities"
2021	InCAP-2021, IEEE	Harsha Verma, and Amritpal Singh, "Pruning in Recommender System using Learned Bloom Filter"
2021	ICACCT Conference, Francis Xavier Engineering College,	Kamal and Amritpal singh, "A Comprehensive Survey on Learning Models Used in Sentiment Analysis"
2019	IEEE third international conference on Intelligent computing and control systems, VAIGAI, MADURAI.	Ravneet Kaur , Amritpal Singh, Shalini Batra \A short survey on role of bloom lters in NDN",
2017	GLOBECOM 2017 IEEE Global Communications Confer- ence, IEEE	Divya Gupta, Sahil Garg, Amritpal Singh, Shalini Batra, Neeraj Kumar, and M. S. Obai- dat. \ProIDS: Probabilistic Data Structures Based Intrusion Detection System for Network Traffic Monitoring."

## Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISS N No.	Year
BOOK CHAPTER	Advanced Healthcare Systems: Empowering Physicians with IoT-Enabled Technologies	Scrivener Publishing LLC	A Comprehensive Analysis on Masked Face Detection Algorithms Pranjali Singh, Amitesh Garg and Amritpal Singh		2022
BOOK CHAPTER	Advanced Healthcare Systems: Empowering Physicians with IoT-Enabled Technologies	Wiley	Hritu Raj, Mohit Kumar, Prashant Kumar, Amritpal Singh, Om Prakash Verma  Issues and Challenges related to Privacy and Security in Health-care using IoT, Fog and Cloud computing		2021

## Events Organized :

Category	Type	Title	Venue	From	To	Designation
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Workshop	National	Data mining using R	Two day workshop on "Data mining using R" for PhD/ME Scholars at Thapar Institute of Engineering and Technology, Patiala, Punjab.	09-03-15	10-03-15	Research Scholar
STC	National	Exploring Potential: STC on 2020 research advances towards generating leading investigators	NIT-JALANDHAR (ONLINE)	24-08-2020	28-08-2020	Coordinator
STC	International	Identify the Weakest Link: An International e-STC on recent attacking and defensive strategies	NIT-JALANDHAR(ONLINE)	10-08-2020	14-08-2020	CO-CONVENER
SUMMER SCHOOL	National	Basics of Data Science using Python and R (BDSPP-2021)	NIT-JALANADHAR(ONLINE)	09-08-2021	31-08-2021	Coordinator

### PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Ankit Kumar	*yet to finalize*	ongoing	2022	
SHEO KUMAR	*yet to finalize*	ongoing	2021	
Mandeep Kumar	Efficient Storage and Retrieval of Big data in Smart Cities Using Probabilistic Data Structure	ongoing	2020	
Aditya Gupta	Towards Design and Analysis of Fog Centric Intelligent Frameworks for Healthcare 4.0	ongoing	2020	

### PG Dissertation Guided :

Student Name	Dissertation Title	Status	Year	Co-Supervisor
Harsha Verma	Pruning in Recommender System using Learned Bloom Filter	completed	2021	
KAMAL KUMAR	SENTIMENT ANALYSIS USING VOTING ENSEMBLE BASED TECHNIQUES	completed	2021	
Pranjali Singh	Unmasking the Masked face using Zero-Shot Learning	completed	2021	

### Patents :

Name	Reg./Ref. No.	Date of Award/Filing	Organization	Status
FINGERPRINT BASED DUPLICATE DETECTION IN STREAMED DATA	SW-14016/2020		copyright.gov.in	Granted
Ensemble based spam detection in social IoT using Probabilistic data structures	SW-14674/2021		copyright.gov.in	Granted
Heart Disease Prediction	11554/2021-CO/SW		copyright.gov.in	Filed

A DRONE BASED DISASTER RECOVERY WITH COMMUNICATION FACILITY USING LIGHT BASED COUPLED WITH RF BASED SYSTEM	202111050213	02-Nov-2021	Patent Office India	Filed
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### Admin. Responsibilities :

Position Held	Organization	From	To
Coordinator of National Academic repository	NIT JALANDHAR	02/03/2021	TILL DATE
Member of Unnat Bharat Abhiyan	NIT JALANDHAR	02/03/2021	TILL DATE
Alumni Coordinator for CSE department	CSED, NIT JALANDHAR		