## **Profile Page**

### **Research Interests:**

Software quality assessment, program comprehension, dynamic metrics, static and dynamic program analysis, software code smells and refactoring, evidence-based software engineering, Internet of Things (IoT), music technology and computer science education

### **Other Profile Links:**

#### Personal Web Link:

www.pvsingh.com Click Here

### **Journal Publications:**

Year	Journal	Publication
2017	Computers and Security (Elsevier),	Karanpreet Singh, Paramvir Singh, Krishan Kumar, "Application Layer
	vol 65, pp. 344-372	HTTP-GET Flood DDoS Attacks: Research Landscape and Challenges"
2017	International Journal of Systems	Prita Yadav, Paramvir Singh, "Comparative performance analysis of
	Assurance and Management	calling context profiling data structures"
	(Springer), vol. 8, pp. 135-150	
2017	Journal of Biology and Today's	Kawaljeet, Renu Dhir and Paramvir Singh, "Software Clustering using
	World, In Press	hybrid Flower Pollination Algorithm"
2017	International Journal of Intelligent	Karanpreet Singh, Paramvir Singh, Krishan Kumar, "Fuzzy-based User
	Systems and Applications, In Press	Behavior Characterization to Detect HTTP-GET Flood Attacks"
2017	International Journal of Intelligent	Karanpreet Singh, Paramvir Singh and Krishan Kumar, "Impact analysis
	Engineering Informatics	of application layer DDoS attacks: A simulation study"
	(Inderscience), vol. 5, no. 1, pp.	
	80-100	
2016	Computers and Security (Elsevier),	Karanpreet Singh, Paramvir Singh, Krishan Kumar, "A systematic review
	vol. 56, pp. 111-139	of IP traceback schemes for denial of service attacks"
2016	International Journal of	Harpreet Singh, Paramvir Singh, "Enhancing AES using Novel Block
	Cyber-Security and Digital	Key Generation Algorithm and Key Dependent S-boxes"
	Forensics, vol. 5, no. 1, pp. 30-45	
2015	International Journal of Intelligent	Kawaljeet, Renu Dhir and Paramvir Singh, "Hybrid Black Hole
	Systems and Applications, vol. 4,	Algorithm for Bi-Criteria Job Scheduling on Parallel Machines"
	pp. 1-17	
2014	ACM SIGSOFT SEN, vol. 39, no.	Rani Geetika, Paramvir Singh, "Empirical investigation into static and
	1, pp. 1-8	dynamic coupling metrics"
2014	ACM SIGSOFT SEN, vol. 39, no.	Rani Geetika, Paramvir Singh, "Dynamic coupling metrics for object
	2, pp. 1-8	oriented software systems: A Survey"
2014	International Journal of Computer	Shelza Kapur, Paramvir Singh, "Performance analysis of DCT based
	Science and Engineering	digital image watermarking using color spaces effects"
	Technology, vol. 05, no. 06	
2008	ACM SIGSOFT SEN, vol. 33, no.	Paramvir Singh, Hardeep Singh, "DynaMetrics: A runtime metric-based
	6, pp. 1-6	analysis tool for object-oriented software systems"
2007	Computer Society of India (CSI)	Paramvir Singh, Hardeep Singh, "Runtime coupling metrics at various
	Journal, vol. 37, no. 03.	levels of abstraction"

## **Conference Publications:**

Year	Conference	Publication
2017	Evaluation and Assessment in Software Engineering	Paramvir Singh, Karanpreet Singh, "Exploring
		Automatic Search in Digital Libraries – A Caution
		Guide for Systematic Reviewers"
2017	International Conference on Computers, Software and	Veena Saini, Paramvir Singh and Ashish Sureka,
	Applications (COMPSAC), Turin, Italy	"SEABED: An Open-Source Software Engineering
		Case Based Learning Database"
2017	Evaluation and Assessment in Software Engineering,	Paramvir Singh, Karanpreet Singh, "Exploring
	Karlskrona, Sweden	Automatic Search in Digital Libraries – A Caution
		Guide for Systematic Reviewers"
2017	16th International Conference on Information	Sarishty Gupta, Paramvir Singh, "Comprehending
	Technology (ICIT), to be held in Orissa, India	Scenario-level Software Evolution using Calling
		Context Trees"
2017	10th Innovations in (formerly, India) Software	Arvind Mahindru and Paramvir Singh, "Dynamic
	Engineering Conference (ISEC 2017), Jaipur, India.	Permissions based Android Malware Detection using
		Machine Learning Techniques"
2017	23rd Asia Pacific Software Engineering Conference	Garima Dhaka and Paramvir Singh, "An Empirical
	(APSEC), Hamilton, New Zealand	Investigation into Code Smells Elimination Sequences
		for Energy Efficient Software"
2016	23rd Asia Pacific Software Engineering Conference	Garima Dhaka and Paramvir Singh, "An Empirical
	(APSEC), Hamilton, New Zealand	Investigation into Code Smells Elimination Sequences
		for Energy Efficient Software"
2016	International Conference on Computational	Gurpreet Kaur and Paramvir Singh, "Validating
	Techniques in Information and Communication	Software Evolution of Agile Projects using Lehman's
	Technology (IEEE), IPU, New Delhi, India	Laws"
2016	International Conference on Computational	Monika and Paramvir Singh, "Modularizing software
	Techniques in Information and Communication	systems using PSO optimized hierarchical clustering"
	Technology (IEEE), IPU, New Delhi, India.	
2015	22nd Asia Pacific Software Engineering Conference	Shallu Sarvari, Paramvir Singh and Geeta Sikka,
	(APSEC) (IEEE), New Delhi, India	"Efficient and scalable collection of dynamic metrics
		using map-reduce"

# **Book/Chapter Publications:**

Type	Title	Publisher	Authors	ISBN/ISS	Year
				N No.	
Book	Towards defining semi-markov dynamic	Deep and Deep	Paramvir Singh	978-81845	2009
Chapter	conditional random fields (semi-DCRFs) /	Publications Pvt.		01834	
	Enterprise Information Systems in 21st	Ltd., New Delhi,			
	Century	India			
Book	Overview of runtime coupling and	Deep and Deep	Paramvir Singh,	978-81845	2009
Chapter	cohesion metrics for object-oriented	Pvt. Ltd., New	Geeta Sikka and	01834	
	software systems / Enterprise Information	Delhi, India	Hardeep Singh		
	Systems in 21st Century				

## **Events Organized:**

Category	Type	Title	Venue	From	То	Designation
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Workshop	International	"Research-Teaching	NIT Jalandhar	15-09-16	24-09-16	Coordinator
		Exchange Excursion				
		Workshop" sponsored				
		partially under the				
		program of				
		International				
		Co-operation				
		Promotion, BayIntAn				
		from the Bavarian				
		Research and				
		Innovation Agency,				
		Bavaria, Germany, and				
		co-organized by NIT				
		Jalandhar and Technical				
		University of Munich				
		(TUM), Germany				
Short Term	National	Recent Trends in	NIT Jalandhar	01-06-15	05-06-15	Coordinator
Course		Software Engineering				
(STC)		and Knowledge Mining				
		sponsored by TEQIP II				
Short Term	National	Data Analysis and Soft	NIT Jalandhar	09-06-14	13-06-14	Coordinator
Course		Computing				
(STC)						
Short Term	National	Advances in Software	NIT Jalandhar	16-12-13	20-12-13	Coordinator
Course		Engineering and				
(STC)		Knowledge based				
		Systems sponsored by				
		TEQIP II				

### **Professional Affiliations:**

Designation	Organization	
Member Institute of Electrical and Electronics Engineers (IEEE) and IEEE Computer Socie		
	USA	
Life Member	Indian Society for Technical Education (ISTE), New Delhi, India	

# PhD Supervised:

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Karanpreet Singh	Defending Web Services against Application	Thesis	2017	Krishan Kumar
	Layer DDOS Attacks	Submitted		

## Admin. Responsiblities:

Position Held	Organization	From	To
Warden, Mega Boys Mega Hostel	NIT Jalandhar	05-03-17	till date
Block-F			
Coordinator, Communications	NIT Jalandhar	06-09-13	till date
MTech (Full-Time) CSE Program	NIT Jalandhar	2013	till date
Coordinator			