Name: Dr. Puneet Jai Kaur

**Designation:** Associate Professor (I.T.)

**Department:** University Institute of Engineering and Technology

Organisation: Panjab University, Chandigarh

**Contact Number:** 91-9914257047(M)

E-mail address: puneet@pu.ac.in, puneetkaur79@yahoo.co.in

### **Educational Qualifications**

S. No.	Qualification	University	Year
1.	Ph.D. (C.S.E)	Panjab University, Chandigarh	Jan 2019
2.	M. E. C.S.E. (I.T.)	Panjab University, Chandigarh	2005
3.	B.Tech. C.S.E.	Guru Nanak Dev University, Amritsar	2002

**Teaching Experience:** 15+ years

Subjects Taught: Operating System, Data Structures, Cloud Computing, Network Security &

Cryptography, Software Testing and Quality Assurance, Computer networks.

Research Interest: Software Quality Assurance, Aspect Oriented Software Development, Data

Mining, Security in Cloud Computing and IoT.

M.E. Guidance: 19 Degree Awarded, 2 Ongoing

**PhD Guidance:** 2 pursuing

#### **ME Research Guidance Topics**

S.No.	Title	Candidate	Status
1.	Comparative Analysis of Usability of E-Commerce	Ms. Jaspreet Kaur	Degree
	Websites using Open Source Tools		Awarded
2.	Simulation Model For Incremental Software Development	Mr. Amninder Singh	Degree
	Life Cycle		Awarded
3.	Analysis of Clustering Techniques for Measurement of	Ms. Megha	Degree
	Cohesion		Awarded
4.	Analysis of Performance of Apache Tez and MapReduce	Mr. Rupinder Singh	Degree
	Framework on the basis of Validity measures		Awarded
5.	Analysis of Validity Measures using Hierarchical and	Ms. Nisha	Degree
	Graph Clustering Technique		Awarded
6.	Comparative Evaluation of Static Analysis tools for	Ms. Hanmeet Kaur	Degree
	Security	Brar	Awarded

7.	A Dynamic Cohesion Metric for Aspect Oriented	Mr. Himanshu Dua	Degree
	Programming		Awarded
8.	Comparison of Maintainability Metrics: Aspect Oriented	Ms. Sarita Rani	Degree
	Software vs Object Oriented Software		Awarded
9.	A GUI Based Unit Testing Technique for Anti-Pattern	Ms. Harvinder Kaur	Degree
	Detection Through Automation		Awarded
10.	Analysis of Clustering Techniques for Software Defect	Ms. Pallavi	Degree
	Prediction		Awarded
11.	Analyzing the effect of Access Specifiers on Cohesion in	Ms. Amandeep Kaur	Degree
	Object Oriented Systems		Awarded
12.	Effect of Accessibility levels on Class Cohesion Metric	Ms. Rupinder Kaur	Degree
	for Object Oriented Systems		Awarded
13.	Ontology Based Crawler For College Domain	Ms. Neha Sharma	Degree
			Awarded
14.	Comparative analysis of Web Effort Estimation Methods	Ms. Kritika	Degree
	Using OO-HFP as Size Measure		Awarded
15.	Design, Implementation and Evaluation of Grid	Mr. Jagpreet Sidhu	Degree
	Environment for DV to MPEG4 Conversion		Awarded
16.	Implementation and Comparison of RFT and QTP for	Ms. Shilpa Mahajan	Degree
	Automation Software Testing		Awarded
17.	Verification of the Dependency Preserving Aspects of the	Ms. Karanvir Kaur	Degree
	Normalization for Semistructured Data Using OWL		Awarded
18.	Dynamic Metrics at Design Level	Ms. Payal Khurana	Degree
			Awarded
19.	Comparative Analysis of White Box Testing Techniques	Ms. Monica	Degree
	using Fault Detection		Awarded

# **List of Publications**

## Journals

Journa	Journais		
1.	Green Computing: Some facts and challenges, International journal of Management, IT		
	& Engineering, IJMRA, April 2019		
2.	Fog Computing: A road to new era, International Journal of Information and		
	Computing Science, IJICS, May 2019		
3.	Usability Evaluation of E-Commerce Websites, International Journal of Scientific &		
	Engineering Research (IJSER), Volume 9, Issue 12, December-2018		
4.	Sarcasm Detection: A review, International Journal of Computer Engineering and		
	Applications, IJCEA, Feb 2018		
5.	A Framework for Assessing Reusability using Package Cohesion measure in Aspect		
	Oriented Systems, IJPP, Springer, June 18		
6.	A fuzzy approach for estimating quality of Aspect Oriented System, IJPP, Springer,		
	Dec 2018		

7.	A simulation Model for incremental software Development life cycle model,
	International Journal of Advanced Research in Computer Science (IJARCS), July- Aug,
	2017
8.	Analyzing performance of Apache Tez and MapReduce with hadoop multinode cluster
	on Amazon cloud, Journal of Big Data, springer, OCT 2016
9.	Dynamic Cohesion Metrics for Aspect Oriented Programming", International Journal of
	Emerging Technologies in Computational and Applied Sciences (IJETCAS), IASIR,
	Sep – Nov 2014, pg 110-115.
10.	"Analysis of Cohesion Metrics for Aspect Oriented System", International Journal of
	Application or Innovation in Engineering and Management (IJAIEM), Vol 3, Issue 4,
	April 2014, pg 369-373.
11.	"A study on detection of Anti-Patterns in Object Oriented System", International Journal
	of Computer Applications, Vol 93, No. 5, MAY 2014, pg 25-28.
12.	"Impact of Aspect Oriented programming on Software Maintainability - A Descriptive
	Study", International Journal of emerging Technologies in Computational and Applied
	Sciences(IJETCAS), published by IASIR, March-May, 2014, issue 8, Volume 2, pp 153-
	157.
13.	"Analysis of Maintainability metrics for Aspect Oriented Software and object oriented
	software", International Journal of emerging Technologies in Computational and Applied
	Sciences(IJETCAS), published by IASIR, March-May, 2014, issue 8, Volume 6, pp 470-
	475.
14.	"Comparison of High level Design based class Cohesion metrics", International Journal
	of Computer Trends and Technology (IJCTT) - Vol 4, Issue 5, May 2013, pg 1243 -
	1246.
15.	"Data Mining Techniques for Software Defect Prediction", Published in IJSWS, Issue
	3, Volume 1, pp. 54-57, December, 2012- February, 2013
16.	"Class cohesion metrics in object oriented systems", International Association of
	Scientific Innovation and Research (IASIR), volume 2, issue 3, pp. 78-82, Feb 2013.

# **Book Chapters**

1.	Using Clustering for Package Cohesion Measurement in Aspect Oriented Systems, Smart
	Innovations, Systems and Technologies (SIST) Series, Springer, Dec 2018
2.	Effect of Package Cohesion on Evaluation of Reusability in Aspect Oriented Systems,
	Communications in Computer and Information Science, Springer, Dec 2018
3.	Cohesion and Coupling measures for Aspect Oriented Systems", Advances on Engineering
	and Technology Series (AETS), Elsevier publication, vol - 7, 2013, pg 784-788.
4.	Security Concerns in Cloud Computing, Communications in Computer and Information
	Science, Springer, July 2011

## **Papers Published in Conferences**

1.	Theoretical and Empirical Analysis of Usage of MapReduce and Apache tez in Big
	Data, 1st International Conference on Information and Communication Technology for
	Intelligent Systems, i n Smart Innovations , Systems and Technologies, Vol2, vol 51, pp
	529-536, Springer
2.	"Cluster Quality Based Performance Evaluation of Hierarchical Clustering Methods", 1st
	International Conference on Next Generation Computing Technologies, IEEE, Sep 2015
3.	"Comparing Detection ratio of three static analysis tools", International Journal of
	Computer Applications (0975 – 8887) Volume 124 – No.13, August 2015 pp 35 - 40
4.	"Differentiating Integration Testing and Unit Testing", 2nd Conference on Computing
	for sustainable global Development (INDIACOM), IEEE, March 2015.
5.	"A survey of Clustering Techniques and Algorithms", 2nd Conference on Computing for
	sustainable Global Development (INDIACOM), Noida, IEEE indexed, March 2015.
6.	"Clustering Techniques and Cohesion Measurement", Chandigarh Science Congress,
	Feb 25-27, 2015, Panjab University, Chandigarh
7.	Package Level metric for Reusability in Aspect Oriented System", ABLAZE 2015, IEEE
	conference, Amity University, Noida, 25-27 feb, 2015.
8.	A GUI based unit testing Technique for Anti-Pattern Identification", International
	Conference -The Next Generation Information Technology Summit (Confluence),
	Noida, IEEE digital Library , 978-1-4799-4236-7/14/\$31.00_c 2014 IEEE, Sep 25-26,
	2014, pg 779-782.

9.	"Optimized Unit Testing for Antipatten Detection", ICTCS, Nov 14-16, Udaipur,
	Rajasthan, ACM <a href="http://dx.doi.org/10.1145/2677855.2677909">http://dx.doi.org/10.1145/2677855.2677909</a> ,
10.	"An Empirical Study for Defect Prediction Using Clustering", Fourth International
	Conference on Recent trends in Information, Telecommunication and Computing, ITC
	– 2013, August 1-2, Chandigarh
11.	Software Defect Prediction using Data Mining Techniques", Chandigarh Science
	Congress, March 1-3, 2013, Panjab University, Chandigarh.
12	Developing Automated Test Oracle Methods, IEEE- ICAER'11, UIET, Panjab
	University, Chandigarh, Oct 15, 2011
13	Motivation of Aspect oriented software development in comparison to object Oriented
	Software Development, IEEE- ICAER'11, UIET, Panjab University, Chandigarh, Oct
	15, 2011.
14	Software Defect Prediction using Bayesian Belief Networks", IEEE- ICAER'12, Oct 6,
	2012, UIET, Panjab University, Chandigarh. Oct 6, 2012.