

Special Session
on
(“MINING SOFTWARE REPOSITORIES”)
International Conference on Computational Intelligence and Data Science
(ICCIDS 2018)
<http://iccids2018.ncuindia.edu/>
7-8th April, 2018
at
The NorthCap University, Gurugram

AIM: At the time of software development various repositories such as version control information, defect tracking information, archived communication information, etc., gets generated. Mining the information present in these repositories can be beneficial in improving both software development product and process. The data present in these repositories can be used to reveal hidden relationship between various software development deliverables, practices and technologies. The mined information is beneficial in understanding the current practices of software development that can be utilized to build prediction models. These prediction models can be beneficial in automating various software development tasks as well as in planning future development. The aim of this special session is to bring practitioners from both academia and industry to share their insights, problems, experiences and current advancements in the field of software engineering. In this special session, we invite technical papers describing original and unpublished results of foundational, theoretical, empirical, and applied software engineering research.

SCOPE: Software development process can be divided into multiple steps such as requirement gathering, design, code, testing, and debugging. Each step of the software development process generates a different type of repository. Each of these repositories consists of a different type of information. However, the amount of data present in these repositories makes it a very challenging task to extract useful information from these repositories. For example, issue tracking system consists of information about issues that gets reported. However, it is challenging to identify the types of issue and the best person to fix the issue because thousands of issues are reported each day. Similarly, archived communication information between software practitioners consists of emails and other software development discussion information. It is noticed that several times the same practitioners is communicating with different ids and it is challenging to map these ids to the same person. Similarly, software practitioners face several challenges at the time of software development. The special session on mining software repositories bring together academicians, researchers, and practitioners to address the fundamental and practical aspects of software development to improve the quality of software product and process. The commonly explored area include software evolution, models of software development processes, characterization of developers and their activities, prediction of future software qualities, machine learning based models for software bug prediction, analysis of software change patterns, and analysis of code clones.

Topics of Interest: The topics of interest include but are not limited to:

- ❖ Mining version control systems
- ❖ Mining defect tracking systems

- ❖ Mining software practitioners communication information
- ❖ Empirical analysis of software repositories
- ❖ Mining mobile apps and their reviews
- ❖ Mining software licensing and copyrights
- ❖ Mining execution traces and logs
- ❖ Mining code review repositories
- ❖ Automated software testing
- ❖ Tools and techniques for program comprehension
- ❖ Mining of repositories across multiple projects
- ❖ Models for social and development processes that occur in large software projects
- ❖ Prediction of future software qualities via analysis of software repositories
- ❖ Characterization, classification, and prediction of software bugs based on analysis of software repositories
- ❖ Analysis and improvements of software metrics



Important Dates:

Extended date for submission: 30th January 2018
~~Last date for paper submission: 30th December 2017~~
 Notification of Acceptance: 28th February 2018
 Last date for camera ready paper: 10th March 2018
 Author Registration Deadline: 15th March 2018
 Conference date: 7-8 April 2018

All accepted papers will be published in Procedia Computer Science, Elsevier.

Write Brief Biography of session Chair with photograph

- a) Ms. Sangeeta , b) Mr. Lov Kumar

	<p>Sangeeta is working as an assistant professor in the department of computer science in Jaypee Institute of Information, Technology (JIIT), Noida, from April-2012. She is a part time PhD candidate in the Department of Computer Science and Engineering (CSE) at JIIT (thesis submitted). She received her M. Tech in Computer Science from Indraprastha Institute of Information Technology, Delhi (IIITD), India, in 2011; M.Sc in Computer Science from University of Delhi, India, in 2009; BSc(H) in computer science from University of Delhi, in 2007. She has published several papers in international and national journals and conferences. She is currently serving in Editorial Review Board (ERB) of IJOSSP Journal. She has served as a program committee member for India Software Engineering Conference (ISEC), 2016. She has served as a reviewer for several Journals and conferences: IJOSSP-2017, ISEC-2015, SANER-2015, ICSE SEET-2014, APSEC-2014, APSEC-2013,BDA-2013, ISEC-2013.</p>
	<p>Lov Kumar is presently working as Lecturer at Thapar University, Patiala, India. He has submitted his Ph. D. from Department of Computer Science & Engineering at National Institute of Technology (NIT) Rourkela, India and M. Tech. in Computer Science & Engineering from National Institute of Technology (NIT) Rourkela, India in 2014. His areas of interest are in Quality estimation, web service, Object-Oriented programming and service oriented programming. He is a member of different professional bodies such as IEEE, ACM, CSI, IRD etc.</p>