

# Ashish Sureka

Principal Researcher, ABB Corporate Research Center (India)



## contact

Electronics City  
Bangalore, 560102  
India

ashish.sureka@in.abb.com  
<http://www.ashish-sureka.in>

Twitter  
@ashish\_sureka

## research

Robotics  
Software Analytics  
Mining Software  
Repositories  
Social Media Analytics  
Process Mining

## teaching

Software Engineering  
Information Retrieval  
Database Systems  
Data Mining

## founder

Software Analytics  
Research Lab (SARL)



## experience

2015-Present	<b>ABB (Research Lab)</b> <i>Principal Researcher</i>	Bangalore, India
2014-2015	<b>Siemens (Research Lab)</b> <i>Visiting Researcher</i>	Bangalore, India
2009-2014	<b>Indraprastha Institute of Information Technology (IIITD)</b> <i>Faculty Member, Computer Science</i>	New Delhi, India
2014	<b>Tata Research Development and Design Centre (TRDDC)</b> <i>Visiting Researcher</i>	Pune, India
2005-2009	<b>Infosys (Research Lab)</b> <i>Senior Research Associate</i>	Bangalore, India
2004	<b>IBM Thomas J. Watson Research Center</b> <i>Research Intern</i>	New York, United States
2003	<b>IBM</b> <i>Research Intern</i>	Raleigh (NC), United States
2001	<b>SilverMark Inc.</b> <i>Software Developer Intern</i>	Raleigh (NC), United States
1999-2005	<b>North Carolina State University</b> <i>Graduate Student Teaching and Research Assistant</i>	Raleigh (NC), United States

## education

2002-2005	<b>North Carolina State University (NCSU)</b> <i>PhD (Computer Science)</i>	North Carolina, United States
1999-2002	<b>North Carolina State University (NCSU)</b> <i>MS (Computer Science)</i>	North Carolina, United States

## granted patents

2014	<b>United States Patent: 8752001</b> <i>System and method for developing a rule based named-entity extraction</i>	US8752001 B2
2013	<b>United States Patent: 8489530</b> <i>System and method for root cause analysis of the failure of a manufactured product</i>	US8489530 B2
2013	<b>United States Patent: 8468155</b> <i>Collaborative filtering-based recommendations</i>	US8468155 B2
2010	<b>United States Patent: 7801836</b> <i>Automated predictive data mining model selection using a genetic algorithm</i>	US7801836 B2
2010	<b>United States Patent: 7739297</b> <i>Computerized method, system and program product for generating a data mining model</i>	US7739297 B2
2009	<b>United States Patent: 7523106</b> <i>Computerized data mining system, method and program product</i>	US7523106 B2

## ABB Project Experience

- 2017 **ABB Smart Bot and Virtual Agent Mobile Application for Customer Service**  
Smart Bots, Chat Bots, Artificial Intelligent, Natural Language Processing, Android Mobile Application
- 2015-2016 **Software Development Improvement Program (SDIP) for Automation Engineering (AE)**  
Source Code Metrics for Structured Text (ST), Metrics from Issue Tracking System (IST), Change Prone-ness Prediction
- 2016 **Enabling Easy Programming for YuMi**  
Investigating Programming Systems and Languages for Enabling Easy Programming for Collaborative Robots
- 2015-2016 **ABB WISDOM Distinguished Speaker Seminar Series**  
Founder and Coordinator for WISDOM Seminar Series Inviting Eminent Internal and External Speaker for Talks and Interaction
- 2016 **Smart visualizations, Visual Analytics for ABB Customer Analytics**  
Qlik Sense Desktop, Interactive Data Visualizations, Reports and Dashboards
- 2016 **Customized Change Management and Issue Tracking System**  
Bugzilla, Web Service, Web Application using PHP and MySQL
- 2016 **Customer Lead Data Analytics for Marketers**  
Text Classification, MeaningCloud, Text Analytics, Classification Models

## Mentor ABB Interns

- 2016 **Lov Kumar (PhD Scholar - NIT Rourkela)**  
Program Analysis for IEC 61131-3 Languages
- 2016 **Saurabh Chauhan (MTech Scholar - Ahmedabad University)**  
Internet of Things (IoT) Application Development
- 2016 **Yukti Mehta (MTech Scholar - NIT Jalandhar)**  
Graphical Blocks-Based Programming, Robotics Programming
- 2017 **Krishnapriya Mahajan (MTech Scholar - IIIT Bangalore)**  
Customer Dashboard and Analytics, Data Visualization, Text Mining
- 2017 **Aniket Kumar (MTech Scholar - IIIT Bangalore)**  
Web-Based Change Management System, Mining Issue Tracking System

## Siemens Project Experience

- 2015-2016 **Automatic Bug Triage and Bug Assignment Techniques using Machine Learning**  
Machine Learning Tools, Text Categorization, Mining Software Repositories
- 2015-2016 **Software and Code Change Impact Analysis**  
Software Maintenance, Traceability Examination, Data Mining, Co-change Coupling
- 2015-2016 **Lecture Series on Information Retrieval**  
Taught an Introductory Course on Information Retrieval

## Mentor Siemens Interns

- 2015 **Abhishek Mitra (MTech Scholar - IIIT Delhi)**  
Decision Support Platform for Guiding a Bug Triager for Resolver Recommendation
- 2015 **Manisha Agrawal (MTech Scholar - IIIT Delhi)**  
Predicting Source Code Changes by Mining Revision History

## TCS Project Experience

- 2014 **Semantic Inconsistency Between BPMN Process Model and SBVR Rules**  
Business Process Modeling Notation (BPMN), Semantic of Business Vocabulary and Business Rules (SBVR)
- 2015-2016 **Lecture Series on Information Retrieval**  
Taught an Introductory Course on Information Retrieval

## IIIT Delhi Experience

2009-2014 **Faculty Member (Computer Science)**  
Taught Graduate and Undergraduate Level Courses, Supervised BTech, MTech and PhD Thesis and Dissertations, Conducted research and Published Scholarly Papers in Conferences and Journals

## Infosys Experience

2005-2009 **Senior Researcher (Infosys Labs)**  
Research and Development, Research Prototype Development, Thought Leadership, Technology Realization, Publication and Patents

## IBM Experience

2004 **Graduate Student Research Intern (IBM Thomas J. Watson Research Center (USA))**  
Agent-Based Model (ABM), Autonomous Agents, Autonomic Computing

2003 **Graduate Student Research Intern (IBM Global Services, USA)**  
Data Mining, Machine Learning, Predictive Modeling

## NCSU Experience

1999-2005 **Graduate Student Research and Teaching Assistant**  
MTech and PhD Scholar working towards Doctorate Degree

## Social Media Profiles

**ArXiv** [https://arxiv.org/find/cs/1/au:+Sureka\\_A/0/1/0/all/0/1](https://arxiv.org/find/cs/1/au:+Sureka_A/0/1/0/all/0/1)

**Blogger** <http://ashish-sureka-delhi.blogspot.in>

**DBLP** <http://dblp.uni-trier.de/pers/hd/s/Sureka:Ashish>

**Figshare** [https://figshare.com/authors/Ashish\\_Sureka/3128580](https://figshare.com/authors/Ashish_Sureka/3128580)

**Google Scholar** <https://scholar.google.com/citations?user=-XjsfqYAAAAJ>

**GitHub** <https://github.com/ashishsureka>

**Mendeley** <https://www.mendeley.com/profiles/ashish-sureka/>

**ORCID** <http://orcid.org/0000-0001-6084-9661>

**ResearcherID** <http://www.researcherid.com/rid/H-1631-2015>

**Twitter** [https://twitter.com/ashish\\_sureka](https://twitter.com/ashish_sureka)

## graduated PhD students

2016 **Denzil Correa**  
Content Quality in Web 2.0 Services - Analysis, Detection, Systems and Enhancement

## current PhD students

2017 **Swati Agarwal**  
Social Media Analytics, Mining User Generated Content

2017 **Sangeeta Lal**  
Mining Software Repositories, Automated Software Engineering

## graduated MS/MTech students

- 2015 **Akanksha Mishra**  
Graph Matching Based Approach for Inconsistency Detection between BPMN Business Process Models and SBVR Rules
- 2015 **Ritika Atal**  
A Software Engineering Simulation Game for Teaching Practical Decision Making in Peer Code Review
- 2015 **Kritika Anand**  
Utility-Based Control Flow Discovery from Business Process Event Logs
- 2015 **Divya Kundra**  
Vidushi: Parallel Implementation of Alpha-Miner Algorithm and Performance Analysis on CPU and GPU Architecture
- 2015 **Kunal Gupta**  
Process Discovery Algorithm Implementation and Performance Comparison Experiments in SQL on Hadoop and Row Oriented Databases
- 2015 **Jeevan Joishi**  
Vishleshan: Performance Comparison and Programming Process Mining Algorithms in Graph-Oriented and Relational Database Query Languages
- 2015 **Prerna Juneja**  
Anvaya: A Clustering-Based Approach for Improving the Goodness of Software Process Models Derived from Event-Logs
- 2015 **Nisha Gupta**  
Pariket: A Framework for Mining Business Process Logs for Root Cause Analysis of Anomalous Incidents
- 2015 **Astha Sachdev**  
Khanan: Performance Comparison and Programming Alpha Algorithm in Column-Oriented and Relational Database Query Languages
- 2014 **Manisha Khattar**  
Sarathi: Characterization Study on Regression Bugs and Identification of Regression Bug Inducing Changes: A Case-Study on Google Chromium Project
- 2014 **Yash Lamba**  
Pravaaha: Mining Android Applications for Discovering API Call Usage Patterns and Trends
- 2014 **Nisha Aggarwal**  
Mining YouTube Metadata for Detecting Privacy Invading Harassment and Misdemeanor Videos
- 2014 **Ritika Jain**  
Sanayojan: A Framework for Traceability Link Recovery between Use-Cases in Software Requirement Specification and Regulatory Documents
- 2014 **Megha Mittal**  
Mimansa: Process Mining Software Repositories from Student Projects in an Undergraduate Software Engineering Course
- 2013 **Swati Agarwal**  
Copyright Infringement Detection of Music Videos on YouTube by Mining Video and Uploader Meta-Data
- 2013 **Vidushi Chaudhary**  
Mining Contextual Feature Based One-Class Classifier Approach for Detecting Video Response Spam on YouTube
- 2012 **Denzil Correa**  
WhACKY! What Anyone Could Know About You from Twitter
- 2011 **Sangeeta Lal**  
Static Technique for Fault Localization Using Character N-Gram Based Information Retrieval Model

## research grants

- 2012      **Department of Information Technology (DIT), Government of India**  
Mining Social Media for Countering Online Radicalization
- 2010      **Department of Science and Technology (DST), Government of India**  
Mining Software Repositories for Solving Problems Encountered by a Software Maintenance Professional

## teaching

- 2014      **Introductions to Databases (IIITD)**
- 2014      **Information Retrieval (TCS)**
- 2013      **Software Engineering (IIITD)**
- 2013      **Introductions to Databases (IIITD)**
- 2012      **Software Engineering (IIITD)**
- 2012      **Introductions to Databases (IIITD)**
- 2011      **Software Engineering (IIITD)**
- 2011      **Application Development for Social Media Platforms (IIITD)**
- 2011      **Information Retrieval (IIITD)**
- 2010      **Advanced Programming (IIITD)**
- 2010      **Information Retrieval (IIITD)**
- 2009      **Advanced Programming (IIITD)**

## Citation Impact

22-March-2017 **Google Scholar h-index: 16**  
*Citations: 867, i10-index: 28*

## Awards and Honours

- 2015      **ACM India Eminent Speaker**
- 2003      **Best Paper Award at ICEC 2003**  
International Conference on Electronic Commerce (ICEC 2003)  
**An Algorithm for Computing the Outcome of Combinatorial Auctions with Proxy Bidding**

## publications

- 2017      **International Journal of Open Source Software and Processes (IJOSSP) Volume 7 (Issue 2) 2017**  
*Improving Logging Prediction on Imbalanced Datasets: A Case Study on Open Source Java Projects*  
Sangeeta Lal, Neetu Sardana and Ashish Sureka
- 2017      **ACM SIGWEB Newsletter Spring Issue (ACM SIGWEB 2017)**  
*How Healthy are ACM SIGWEB Sponsored Conferences?*  
Swati Agarwal, Nitish Mittal and Ashish Sureka
- 2017      **Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTeSQuE 2017)**  
**co-located with International Conference on Software Analysis, Evolution, and Reengineering (SANER 2017)**  
*Using Source Code Metrics to Predict Change-Prone Web Services: A Case-Study on eBay Services*  
Lov Kumar, Santanu Kumar Rath and Ashish Sureka
- 2017      **The Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2017)**  
*Investigating the Dynamics of Religious Conflicts by Mining Public Opinions on Social Media*  
Swati Agarwal and Ashish Sureka

- 2017 **Innovations [Formerly India] Software Engineering Conference (ISEC 2017)**  
*Empirical Analysis on Effectiveness of Source Code Metrics for Predicting Change Proneness*  
Lov Kumar, Santanu Kumar Rath and Ashish Sureka
- 2017 **Innovations [Formerly India] Software Engineering Conference (ISEC 2017)**  
*Using Structured Text Source Code Metrics and Artificial Neural Networks to Predict Change Proneness at Code Tab and Program Organization Level*  
Lov Kumar and Ashish Sureka
- 2017 **International Journal of Web Engineering and Technology (IJWET 2017)**  
*A General Overview and Bibliometric Analysis of Seven ACM Hypertext and Web Conferences*  
Swati Agarwal, Nitish Mittal and Ashish Sureka
- 2017 **e-Informatica Software Engineering Journal (EISEJ) Volume 11 (Issue 1) 2017**  
*ECLogger: Cross-Project Catch-Block Logging Prediction using Ensemble of Classifiers*  
Sangeeta Lal, Neetu Sardana and Ashish Sureka
- 2017 **The 18th IEEE International Symposium on High Assurance Systems Engineering (HASE 2017)**  
*Using Source Code Metrics and Multivariate Adaptive Regression Splines to Predict Maintainability of Service Oriented Software*  
Lov Kumar, Santanu Kumar Rath and Ashish Sureka
- 2017 **International Conference on Distributed Computing and Internet Technology (ICDCIT 2017)**  
*A Collision of Beliefs: Investigating Linguistic Features for Religious Conflicts Identification on Tumblr*  
Swati Agarwal and Ashish Sureka
- 2016 **International Workshop on Quantitative Approaches to Software Quality (QuASoQ 2016) in conjunction with 23rd Asia-Pacific Software Engineering Conference (APSEC 2016)**  
*Predicting Quality of Service (QoS) Parameters using Extreme Learning Machines using Various Kernel Methods*  
Lov Kumar, Santanu Kumar Rath and Ashish Sureka
- 2016 **Asia-Pacific Software Engineering Conference (APSEC 2016)**  
*Review of Six Years of Asia-Pacific Software Engineering Conference*  
Lov Kumar, Saikrishna Sripada and Ashish Sureka
- 2016 **International Conference on Advanced Data Mining and Applications (ADMA 2016)**  
*Got a Complaint?- Keep Calm and Tweet It!*  
Nitish Mittal Swati Agarwal and Ashish Sureka
- 2016 **ACM SIGWEB Autumn Issue Newsletter (SIGWEB 2016)**  
*A Scientometric Analysis of 9 ACM SIGWEB Cooperating Conferences*  
Swati Agarwal, Nitish Mittal and Ashish Sureka
- 2016 **ACM SIGSOFT Software Engineering Notes September Issue (SIGSOFT SEN 2016)**  
*A Nine Year Story of the India Software Engineering Conference from 2008 to 2016*  
Richa Sharma and Ashish Sureka
- 2016 **International Conference on Technology for Education (T4E 2016)**  
*An Experience Report on Teaching Programming and Computational Thinking to Elementary Level Children using Lego Robotics Education Kits*  
Vidushi Chaudhary, Vishnu Agarwal, Pragya Sureka and Ashish Sureka
- 2016 **International Conference on Technology for Education (T4E 2016)**  
*An Experience Report on Teaching Compiler Design Concepts using Case-Based and Project-Based Learning Approaches*  
Divya Kundra and Ashish Sureka



- 2016 **International Conference on Genetic and Evolutionary Computing (ICGEC 2016)**  
*More Efficient Algorithms to Mine Skyline Frequent-Utility Patterns*  
Jerry Chun-Wei Lin, Lu Yang, Philippe Fournier-Viger, Siddharth Dawar,  
Vikram Goyal, Ashish Sureka and Bay Vo
- 2016 **European Intelligence and Security Informatics Conference (EISIC 2016)**  
*But I did not Mean It!- Intent Classification of Racist Posts on Tumblr*  
Swati Agarwal and Ashish Sureka
- 2016 **European Intelligence and Security Informatics Conference (EISIC 2016)**  
*Role of Authors Personality Traits for Identifying Intent Based Racist Posts*  
Swati Agarwal and Ashish Sureka
- 2016 **ACM SIGWEB Newsletter Summer Issue (ACM SIGWEB 2016)**  
*A Glance at Seven ACM SIGWEB Series of Conferences*  
Swati Agarwal, Nitish Mittal and Ashish Sureka
- 2016 **The 40th IEEE Computer Society International Conference on Computers, Software and Applications (COMPSAC 2016)**  
*It Takes Two to Tango: Deleted Stack Overflow Question Prediction with Text and Meta Features*  
Xin Xia, David Lo, Denzil Correa, Ashish Sureka and Emad Shihab
- 2016 **The 40th IEEE Computer Society International Conference on Computers, Software and Applications (COMPSAC 2016)**  
*Anvaya: An Algorithm and Case-Study on Improving the Goodness of Software Process Models generated by Mining Event-Log Data in Issue Tracking Systems*  
Prerna Juneja, Divya Kundra and Ashish Sureka
- 2016 **The 40th IEEE Computer Society International Conference on Computers, Software and Applications (COMPSAC 2016)**  
*LogOptPlus: Learning to Optimize Logging in Catch and If Programming Constructs*  
Sangeeta Lal, Neetu Sardana and Ashish Sureka
- 2016 **ACM SIGSOFT Software Engineering Notes (ACM SIGSOFT SEN) Volume 41, Issue 2 (ACM SIGSOFT 2016)**  
*Insights from Mining Eleven Years of Scholarly Paper Publications in Requirements Engineering (RE) Series of Conferences*  
Richa Sharma, Peeyush Aggarwal and Ashish Sureka
- 2016 **ACM Computers and Society (SIGCAS) Volume 46, Issue 1 (ACM SIGCAS 2016)**  
*Women in Computer Science Research: What is the Bibliography Data Telling Us?*  
Swati Agarwal, Nitish Mittal, Rohan Katyal, Ashish Sureka, and Denzil Correa
- 2016 **International Conference on Information Processing in Sensor Networks (IPSN 2016)**  
*Demonstration Abstract: IoTSuite: A Framework to Design, Implement, and Deploy IoT Applications*  
Saurabh Chauhan, Pankesh Patel, Ashish Sureka, Flavia C. Delicato and  
Sanjay Chaudhary
- 2016 **International Workshop on Emerging Trends in Software Metrics (WETSOM) co-located to International Conference on Software Engineering (ICSE 2016)**  
*Source Code Metrics for Programmable Logic Controller (PLC) Ladder Diagram (LD) Visual Programming Language*  
Lov Kumar, Raoul Jetley and Ashish Sureka
- 2016 **Conference on Data Science (CoDS 2016)**  
*Investigating the Potential of Aggregated Tweets as Surrogate Data for Forecasting Civil Protests*  
Swati Agarwal and Ashish Sureka
- 2016 **9th India Software Engineering Conference (ISEC 2016)**  
*LogOpt: Static Feature Extraction from Source Code for Automated Catch Block Logging Prediction*  
Sangeeta Lal and Ashish Sureka

- 2015 **International Journal of Open Source Software and Processes (IJOSSP) Volume 6 (Issue 1) (IJOSSP 2015)**  
*Two Level Empirical Study of Logging Statements in Open Source Java Projects*  
Sangeeta Lal, Neetu Sardana and Ashish Sureka
- 2015 **3rd International Workshop on Quantitative Approaches to Software Quality (QuASoQ) co-located to 22nd Asia Pacific Software Engineering Conferences (APSEC 2015)**  
*A Decision Support Platform for Guiding a Bug Triage for Resolver Recommendation Using Textual and Non-Textual Features*  
Ashish Sureka, Himanshu Singh, Manjunat Bagewadi, Abhishek Mitra and Rohit Karanth
- 2015 **1st International Workshop on Case Method for Computing Education (CMCE) co-located to 22nd Asia Pacific Software Engineering Conferences (APSEC 2015)**  
*Anukarna: A Software Engineering Simulation Game for Teaching Practical Decision Making in Peer Code Review*  
Ritika Atal and Ashish Sureka
- 2015 **1st International Workshop on Case Method for Computing Education (CMCE) co-located to 22nd Asia Pacific Software Engineering Conferences (APSEC 2015)**  
*A Case-Study on Teaching Software Engineering Concepts using a Case-Based Learning Environment*  
Kirti Garg, Ashish Sureka and Vasudeva Varma
- 2015 **Third International Conference on Mining Intelligence and Knowledge Explorations (MIKE)**  
*Graph Matching Based Approach for Inconsistency Detection between BPMN Business Process Models and SBVR Rules*  
Akanksha Mishra and Ashish Sureka
- 2015 **International Conference on Big Data Analytics (BDA)**  
*Khanan: Performance Comparison and Programming Alpha-Miner Algorithm in Column-Oriented and Relational Database Query Languages*  
Astha Sachdev, Kunal Gupta and Ashish Sureka
- 2015 **International Conference on Big Data Analytics (BDA)**  
*Utility-Based Control Flow Discovery from Business Process Event Logs*  
Kritika Anand, Nisha Gupta and Ashish Sureka
- 2015 **Asia Pacific Software Engineering Conference (APSEC)**  
*EFSPredictor: Predicting Configuration Bugs With Ensemble Feature Selections*  
Bowen Xu, David Lo, Xin Xia, Ashish Sureka and Shanping Li
- 2015 **International Conference on Big Data Analytics (BDA)**  
*Open Source Social Media Analytics for Intelligence and Security Informatics Applications*  
Swati Agarwal, Ashish Sureka and Vikram Goyal
- 2015 **International Workshop on Business Process Intelligence (BPI)**  
*Vidushi: Parallel Implementation of Alpha Miner Algorithm and Performance Analysis on CPU and GPU Architectures*  
Divya Kundra, Prerna Juneja and Ashish Sureka
- 2015 **International Database Engineering & Applications Symposia (IDEAS)**  
*Vishleshan: Performance Comparison and Programming Process Mining Algorithms in Graph-Oriented and Relational Database Query Languages*  
Jeevan Joishi and Ashish Sureka
- 2015 **International C\* Conference on Computer Science & Software Engineering (C3S2E)**  
*Efficient Skyline Itemsets Mining*  
Vikram Goyal and Ashish Sureka
- 2015 **International C\* Conference on Computer Science & Software Engineering (C3S2E)**  
*Pragamana: Performance Comparison and Programming Alpha-Miner Algorithm in Relational Database Query Language and NoSQL Column-Oriented Using Apache Phoenix*  
Kunal Gupta, Astha Sachdev and Ashish Sureka

- 2015 **Mining Software Repositories (MSR)**  
*Identifying Software Process Management Challenges: Survey of Practitioners in a Large Global IT Company*  
Monika Gupta, Ashish Sureka, Srinivas Padmanabhuni and Allahbaksh
- 2015 **5th Workshop on Making Sense of Microposts (MICROPOSTS) co-located with World Wide Web Conference (WWW)**  
*A Topical Crawler for Uncovering Hidden Communities of Extremist Micro-Bloggers on Tumblr*  
Swati Agarwal and Ashish Sureka
- 2015 **Conference on Software Engineering Education and Training (CSEE&T)**  
*In Support of Peer Code Review and Inspection in an Undergraduate Software Engineering Course A Case Study*  
Saikrishna Sripada, Raghu Reddy and Ashish Sureka
- 2015 **International Workshop on Software Analytics (SWAN) co-located with International Conference on Software Analysis, Evolution, and Reengineering (SANER)**  
*University-Industry Collaboration and Open Source Software (OSS) Dataset in Mining Software Repositories (MSR) Research*  
Ambika Tripathi, Savita Dabral and Ashish Sureka
- 2015 **The 8th India Software Engineering Conference (ISEC)**  
*A Report on Software Engineering Education Workshop (SEED) co-located to ISEC 2015*  
Bimlesh Wadhwa, Bharat Gera and Ashish Sureka
- 2015 **Tenth International Workshop - Databases in Networked Information Systems (DNIS)**  
*Pariket: Mining Business Process Logs for Root Cause Analysis of Anomalous Incidents*  
Nisha Gupta, Kritika Anand and Ashish Sureka
- 2015 **Tenth International Workshop - Databases in Networked Information Systems (DNIS)**  
*Topic Specific YouTube Crawling to Detect Online Radicalization*  
Swati Agarwal and Ashish Sureka
- 2015 **Tenth International Workshop - Databases in Networked Information Systems (DNIS)**  
*High Utility Rare Itemset Mining over Transaction Databases*  
Vikram Goyal, Siddharth Dawar and Ashish Sureka
- 2015 **ACM SIGSOFT Software Engineering Notes (ACM SIGSOFT SEN)**  
*A Report on Software Engineering Education Workshop (SEEW) co-located with Asia-Pacific Software Engineering Conference 2014*  
Ashish Sureka, Raghu Reddy, Masateru Tsunoda and Pornsiri Muenchaisri
- 2015 **8th India Software Engineering Conference (ISEC)**  
*Pravaaha: Mining Android Applications for Discovering API Call Usage Patterns and Trends Categories and Subject Descriptors*  
Yash Lamba, Manisha Khattar, Ashish Sureka
- 2015 **8th India Software Engineering Conference (ISEC)**  
*SARATHI: Characterization Study on Regression Bugs and Identification of Regression Bug Inducing Changes : A Case-Study on Google Chromium Project Categories and Subject Descriptors*  
Manisha Khattar, Yash Lamba, Ashish Sureka
- 2015 **8th India Software Engineering Conference (ISEC)**  
*Software Process Intelligence: Mining Software Process Data for Extracting Actionable Information*  
Ashish Sureka, Atul Kumar, Shrinath Gupta
- 2015 **Workshop on Future Information Security (FIS) co-located with International Conference on Communication Systems and Networks (COMSNETS)**  
*Using Common-Sense knowledge-base for Detecting Word Obfuscation in Adversarial Communication*  
Swati Agarwal, Ashish Sureka

- 2015 **11th International Conference on Distributed Computing and Internet Technology (ICDCIT)**  
*Using kNN and SVM based One-Class Classifier for Detecting Online Radicalization on Twitter*  
Swati Agarwal, Ashish Sureka
- 2014 **25th ACM Conference on Hypertext and Social Media (HT)**  
*A Focused Crawler for Mining Hate and Extremism Promoting Videos on YouTube*  
Swati Agarwal, Ashish Sureka
- 2014 **23rd International World Wide Web Conference (WWW)**  
*Chaff from the Wheat : Characterization and Modeling of Deleted Questions on Stack Overflow*  
Denzil Correa, Ashish Sureka
- 2014 **10th International Conference on Open Source Systems (OSS)**  
*Does Contributor Characteristics Influence Future Participation? A Case Study on Google Chromium Issue Tracking System*  
Ayushi Rastogi, Ashish Sureka
- 2014 **International Conference on Management of Data (COMAD)**  
*Kashvi: A Framework for Software Process Intelligence*  
Ashish Sureka, Atul Kumar, G. M. Rama
- 2014 **Joint Conference in Intelligence Security Informatics (JISIC)**  
*Learning to Classify Hate and Extremism Promoting Tweets*  
Swati Agarwal, Ashish Sureka
- 2014 **International Conference on Software Engineering, Software Engineering Education and Training (ICSE SEET)**  
*Process Mining Software Repositories from Student Projects in an Undergraduate Software Engineering Course Categories and Subject Descriptors*  
Megha Mittal, Ashish Sureka
- 2014 **3rd Workshop on Realizing Artificial Intelligence Synergies in Software Engineering (RAISE)**  
*Mining Issue Tracking Systems Using Topic Models for Trend Analysis, Corpus Exploration and Understanding Evolution*  
Ayushi Aggarwal, Gajendra Waghmare, Ashish Sureka
- 2014 **4th Workshop on Mining Unstructured Data (MUD)**  
*Mining Peer Code Review System for Computing Effort and Contribution Metrics for Patch Reviewers*  
Rahul Mishra, Ashish Sureka
- 2014 **Twelfth International Conference on Privacy, Security and Trust (PST)**  
*Mining YouTube Metadata for Detecting Privacy Invading Harassment and Misdemeanor Videos*  
Nisha Aggarwal, Swati Agarwal, Ashish Sureka
- 2014 **Asia-Pacific Software Engineering Conference (APSEC)**  
*MiQs : Characterization and Prediction of Migrated Questions on StackExchange*  
Sangeeta Lal, Denzil Correa, Ashish Sureka
- 2014 **Seventh India Software Engineering Conference (ISEC)**  
*Nirikshan: Mining Bug Report History for Discovering Process Maps, Inefficiencies and Inconsistencies Categories and Subject Descriptors*  
Monika Gupta, Ashish Sureka
- 2014 **21st Asia-Pacific Software Engineering Conference (APSEC)**  
*Process Cube for Software Defect Resolution*  
Monika Gupta, Ashish Sureka
- 2014 **11th Working Conference on Mining Software Repositories (MSR)**  
*Process Mining Multiple Repositories for Software Defect Resolution from Control and Organizational Perspective Categories and Subject Descriptors*  
Monika Gupta, Ashish Sureka, Srinivas Padmanabhuni
- 2014 **23rd Australasian Software Engineering Conference (ASWEC)**  
*Requirements Prioritization and Next-Release Problem under Non-Additive Value Conditions*  
Ashish Sureka

- 2014 **Seventh India Software Engineering Conference (ISEC)**  
*SamikshaViz : A Panoramic View to measure Contribution and Performance of Software Maintenance Professionals by Mining Bug Archives*  
Ayushi Rastogi, Ashish Sureka
- 2014 **3rd Workshop on Realizing Artificial Intelligence Synergies in Software Engineering (RAISE)**  
*A Framework for Traceability Link Recovery between Use-Cases in Software Requirement Specification and Regulatory Documents Categories and Subject Descriptors*  
Ritika Jain, Smita Ghaisas, Ashish Sureka
- 2014 **Asia-Pacific Software Engineering Conference (APSEC)**  
*What Community Contribution Pattern says about Stability of Software Project?*  
Ayushi Rastogi, Ashish Sureka
- 2013 **PST2013 International Conference on Privacy, Security and Trust (PST)**  
*Contextual Feature Based One-Class Classifier Approach for Detecting Video Response Spam on YouTube*  
Vidushi Chaudhary, Ashish Sureka
- 2013 **Second International Conference on Big Data Analytics (BDA)**  
*Copyright Infringement Detection of Music Videos on YouTube by Mining Video and Uploader Meta-Data*  
Swati Agrawal, Ashish Sureka
- 2013 **ACM Conference on Online Social Networks (COSN)**  
*Fit or Unfit: Analysis and Prediction of ' Closed Questions ' on Stack Overflow*  
Denzil Correa, Ashish Sureka
- 2013 **22nd Australasian Software Engineering Conference (ASWEC)**  
*Integrating Issue Tracking Systems with Community-Based Question and Answering Websites*  
Denzil Correa, Ashish Sureka
- 2013 **20th Asia-Pacific Software Engineering Conference (APSEC)**  
*Samekana : A Browser Extension for Including Relevant Web Links in Issue Tracking System Discussion Forum*  
Denzil Correa, Sangeeta Lal, Ashish Sureka, Apoorv Saini
- 2013 **6th India Software Engineering Conference (ISEC)**  
*Samiksha: Mining Issue Tracking System for Contribution and Performance Assessment*  
Ayushi Rastogi, Arpit Gupta, Ashish Sureka
- 2012 **ACM SIGSOFT SEN (Software Engineering Notes)**  
*A Report on Software Engineering Education Workshop*  
Rakesh Shukla, Ashish Sureka, Rushikesh Joshi, Rajib Mall
- 2012 **Fifth India Software Engineering Conference (ISEC)**  
*A Static Technique for Fault Localization Using Character N-Gram Based Information Retrieval Model Categories and Subject Descriptors*  
Sangeeta Lal, Ashish Sureka
- 2012 **The 19th Asia-Pacific Software Engineering Conference (APSEC)**  
*Comparison of Seven Bug Report Types: A Case-study of Google Chrome Browser Project*  
Sangeeta Lal, Ashish Sureka
- 2012 **5th Workshop for Ph.D. Students at the ACM Conference on Information and Knowledge Management (PIKM)**  
*ITop – Interaction Based Topic Centric Community Discovery on Twitter*  
Denzil Correa, Ashish Sureka, Mayank Pundir



- 2012 **50th International Conference on Objects, Models, Components, Patterns (TOOLS Europe)**  
*Learning to Classify Bug Reports into Components*  
Ashish Sureka
- 2012 **The First International Workshop on Software Mining (SoftKDD)**  
*Source Code Identifier Splitting Using Yahoo Image and Web Search Engine*  
Ashish Sureka
- 2012 **Tenth Annual Conference on Privacy, Security and Trust (PST)**  
*WhACKY! – What Anyone Could Know About You from Twitter*  
Denzil Correa, Ashish Sureka, Raghav Sethi
- 2011 **The Eighteenth Asia-Pacific Software Engineering Conference (APSEC)**  
*Applying Fellegi-Sunter (FS) Model for Traceability Link Recovery between Bug Databases and Version Archives*  
Ashish Sureka, Sangeeta Lal, Lucky Agarwal
- 2011 **Third International Workshop on Search and Mining User-Generated Contents (SMUC)**  
*Mining Tweets for Tag Recommendation on Social Media*  
Denzil Correa, Ashish Sureka
- 2011 **International Workshop on Usage Analysis and the Web of Data (USEWOD)**  
*Mining User Comment Activity for Detecting Forum Spammers in YouTube*  
Ashish Sureka
- 2011 **Fourth India Software Engineering Conference (ISEC)**  
*Using Social Network Analysis for Mining Collaboration Data in a Defect Tracking System for Risk and Vulnerability Analysis*  
Ashish Sureka, Atul Goyal, Ayushi Rastogi
- 2011 **International Journal of Business Information Systems (IJBIS)**  
*Fuzzy based clustering algorithm for privacy preserving data mining*  
Pradeep Kumar, Kishore Varma, Ashish Sureka
- 2010 **Databases in Networked Information Systems (DNIS)**  
*AccKW: An Efficient Access Control Scheme for Keyword-Based Search over RDBMS*  
Vikram Goyal, Ashish Sureka, Sangeeta Lal
- 2010 **International Journal of Product Development (IJPDP)**  
*Product failure root cause analysis during warranty analysis for integrated product design and quality improvement for early results in downturn economy*  
Sudripto De, Arindam Das, Ashish Sureka
- 2010 **The 17th Asia-Pacific Software Engineering Conference (APSEC)**  
*Detecting Duplicate Bug Report Using Character N-Gram-Based Features*  
Ashish Sureka, Pankaj Jalote
- 2010 **Fifth International Conference of the Global WordNet Association (GWC)**  
*Generating Domain-Specific Ontology from Common-Sense Semantic Network for Target-Specific Sentiment Analysis*  
Ashish Sureka, Vikram Goyal, Denzil Correa, Anirban Mondal
- 2010 **The 8th International Conference on Natural Language Processing (ICON)**  
*Insights on Transferability of Dialog-Act Cue-Phrases Across Communication Domains, Modality and Semantically Similar Dialog-Acts*  
Ashish Sureka, Atul Goyal
- 2010 **The Sixth Asia Information Retrieval Society Conference (AIRS)**  
*Mining YouTube to Discover Extremist Videos, Users and Hidden Communities*  
Ashish Sureka, Ponnurangam Kumaraguru, Atul Goyal, Sidharth Chhabra
- 2010 **Third Annual ACM Bangalore Conference (COMPUTE)**  
*Linguistic Analysis of Bug Report Titles with Respect to the Dimension of Bug Importance*  
Ashish Sureka, Kishore Varma Indukuri

- 2009 **Twelfth International Conference on Fuzzy Sets, Data Mining & Granular Computing (RSFDGrC)**  
*Polarity Classification of Subjective Words Using Common-Sense Knowledge-Base*  
Ashish Sureka, Vikram Goyal, Denzil Correa, Anirban Mondal
- 2009 **Advanced Data Mining and Applications (ADMA 2009)**  
*Semantic Based Text Classification of Patent Documents to a User-Defined Taxonomy*  
Ashish Sureka, Pranav Prabhakar Mirajkar, Prasanna Nagesh Teli, Girish Agarwal and Sumit Kumar Bose
- 2008 **Database Systems for Advanced Applications (DASFAA 2008)**  
*Mining Automotive Warranty Claims Data for Effective Root Cause Analysis*  
Ashish Sureka, Sudripto De and Kishore Varma
- 2008 **Ninth International Conference on Web-Age Information Management (WAIM 2008)**  
*An Algorithm for Classifying Articles and Patent Documents Using Link Structure*  
Kishore Varma, Pranav Mirajkar and Ashish Sureka
- 2008 **Pacific Rim International Conference on Artificial Intelligence (PRICAI 2008)**  
*An Empirical Study on the Effect of Different Similarity Measures on User-Based Collaborative Filtering Algorithms*  
Ashish Sureka and Pranav Prabhakar Mirajkar
- 2008 **Advanced Data Mining and Applications (ADMA 2008)**  
*Using Genetic Algorithms for Parameter Optimization in Building Predictive Data Mining Models*  
Ashish Sureka and Kishore Varma Indukuri
- 2007 **International Conference on Computational Intelligence and Multimedia Applications (ICCIMA 2007)**  
*Similarity Analysis of Patent Claims Using Natural Language Processing Techniques*  
Ashish Sureka and Kishore Varma Indukuri
- 2005 **International joint conference on Autonomous Agents and Multiagent Systems (AAMAS 2005)**  
*Using Tabu Best-Response Search to Find Pure Strategy Nash Equilibria in Normal Form Games*  
Ashish Sureka and Peter R. Wurman
- 2005 **Annual conference on Genetic and Evolutionary Computation (GECCO 2005)**  
*Applying Metaheuristic Techniques to Search the Space of Bidding Strategies in Combinatorial Auctions*  
Ashish Sureka and Peter R. Wurman
- 2003 **International Conference on Electronic Commerce (ICEC 2003)**  
*An Algorithm for Computing the Outcome of Combinatorial Auctions with Proxy Bidding*  
Peter R. Wurman, Ganghu Cai, Jie Zhong and Ashish Sureka
- 2003 **ACM conference on Electronic Commerce (EC 2003)**  
*Computing the Outcome of Proxy Bidding in Combinatorial Auctions*  
Peter R. Wurman, Ganghu Cai and Ashish Sureka
- 2002 **Mining Web Data for Discovering Usage Patterns and Profiles (WEBKDD 2002)**  
*Mining eBay: Bidding Strategies and Shill Detection*  
Harshit S. Shah, Neeraj R. Joshi, Ashish Sureka and Peter R. Wurman
- 2002 **International conference on quality of future internet services and internet charging and QoS technologies 2nd international conference on From QoS provisioning to QoS charging (ICQT 2002)**  
*Applying the Generalized Vickrey Auction to Pricing Reliable Multicasts.*  
Ashish Sureka and Peter R. Wurman

## Research Dataset

- 2016 **Mendeley Data DOI: 10.17632/8hp39rknnns.1**  
*Religious Beliefs on Social Media: Large Dataset of Tumblr Posts and Bloggers*  
Swati Agarwal and Ashish Sureka
- 2016 **Figshare Data DOI: 10.6084/m9.figshare.3846984.v1**  
*Meta-Data of Mining Software Repositories (MSR) conference Papers from 2004 to 2016*  
Lov Kumar and Ashish Sureka
- 2016 **Figshare Data DOI: 10.6084/m9.figshare.3843996.v1**  
*Meta-Data of Papers in Asia-Pacific Software Engineering Conference (APSEC) from 2010 to 2015*  
Lov Kumar, Saikrishna Sripada and Ashish Sureka
- 2016 **Figshare Data DOI: 10.6084/m9.figshare.3843738.v1**  
*Meta-Data of Papers in India Software Engineering Conference from 2008 to 2016*  
Richa Sharma and Ashish Sureka
- 2016 **Mendeley Data DOI: 10.17632/hd3b6v659v.1**  
*Semantically Analyzed Metadata of Tumblr Posts and Bloggers*  
Swati Agarwal and Ashish Sureka
- 2016 **Mendeley Data DOI: 10.17632/dn5d8fbkb9.1**  
*DBLP Publications Records and ACM Metadata for SIGWEB Conferences*  
Swati Agarwal, Ashish Sureka and Nitish Mittal
- 2016 **Mendeley Data DOI: 10.17632/3p9w84t5mr.1**  
*DBLP Records and Entries for Key Computer Science Conferences*  
Swati Agarwal, Ashish Sureka, Nitish Mittal, Rohan Katyal and Denzil Correa
- 2016 **Mendeley Data DOI: 10.17632/w2cp7h53s5.1**  
*Enhanced Dataset of Citizen Centric Complaints and Grievances on Twitter*  
Swati Agarwal, Nitish Mittal and Ashish Sureka
- 2016 **Mendeley Data DOI: 10.17632/2cjbzwmphk.1**  
*Eleven Years (2005-2015) of Requirements Engineering (RE) Conference Data*  
Ashish Sureka, Richa Sharma, Peeyush Aggarwal
- 2016 **Mendeley Data DOI: 10.17632/kvgpsz8jbn.1**  
*10 Years Data Snapshot of ACM SIGWEB Cooperating Conferences*  
Swati Agarwal, Nitish Mittal and Ashish Sureka

## Publicly Available Tools

- 2016 **URL: <http://seabed.in/>**  
*(SEABED) Software Engineering - Case Based Learning Database*  
Ashish Sureka, Paramvir Singh, Yukti Mehta
- 2016 **URL: <http://cruise-platform.in/>**  
*(CRUISE) Crowd-Sourcing Based Requirements Elicitation Platform*  
Ashish Sureka, Richa Sharma



## service

- Program Committee Member IEEE Working Conference on Software Visualization (VISSOFT 2017)
- Program Committee Member International Conference on Computing, Communication and Automation (ICCCA 2017)
- Program Committee Member ICSE Software Engineering in Practice (SEIP) Track 2017
- Program Committee Member International Conference on Software Maintenance and Evolution (ICSME) 2017
- Publication Chair APSEC Workshops 2016 (QuASoQ + TDA)
- Guest Speaker at Robofest (an annual robotics festival and competition) Bangalore
- Program Committee Member International Conference on Program Comprehension (ICPC) 2017
- Reviewer for Elsevier Journal of Information Systems
- Reviewer for Journal of Information and Software Technology (IST)
- Program Committee Member Innovations in Software Engineering Conference (ISEC) 2017
- Publication Chair Innovations in Software Engineering Conference (ISEC) 2017
- Program Committee Member Mining Software Repositories (MSR) 2016
- Program Committee Member Asia-Pacific Software Engineering Conference (APSEC) 2016
- Program Committee Member IFIP Conference on e-Business, e-Services and e-Society 2016
- Program Committee Member Conference on Computing Communication and Automation (ICCCA) 2016
- Program Committee Member AwareCities (Percom 2016 Workshop) 2016
- Review Board Member for Empirical Software Engineering (EMSE) Journal (2014-2015)
- Associate Editor (Program Committee Member) - European Conference on Information Systems (ECIS 2016)
- **General Co-Chair** India Software Engineering Conference (ISEC) 2016
- **Conference Chair** Asia-Pacific Software Engineering Conference (APSEC) 2015
- Program Committee Member India Software Engineering Conference (ISEC) 2016
- Program Committee Member International Conference on Contemporary Computing (IC3) 2015
- Program Committee Member First International Workshop on DevOps co-located to ASE 2015
- Journal Reviewer Elsevier Science of Computer Programming 2015
- Program Committee Member Big Data Analytics (BDA) 2015
- Program Committee Member Asia-Pacific Software Engineering Conference (APSEC) 2015
- Industry Track **Program Co-Chair** Software Analysis, Evolution, and Reengineering (SANER) 2016
- Software Engineering Education Workshop (SEEW 2014) Co-Organizer co-located with (APSEC) 2014
- Program Committee Member Conference on Computing Communication and Automation (ICCCA) 2015
- Tutorial Presenter India Software Engineering Conference (ISEC), 2015
- Program Committee Member Privacy, Security and Trust (PST) 2015
- Program Committee Member ICAC3 2015
- Program Committee Member European Conference on Information Systems (ECIS) 2015
- Tutorial Presenter Conference on Management of Data (COMAD), 2014
- Program Committee Member International Workshop on Software Analytics (SWAN) 2015
- Software Engineering Education Workshop (SEED 2015) Co-Organizer co-located with (ISEC) 2015
- Program Committee Member International Conference on Computer and Computational Sciences (ICCCS) 2015
- Program Committee Member Conference on Data Sciences (CoDS) 2015

- Program Committee Member Software Analysis, Evolution and Reengineering (SANER) 2015
- Finance Chair Asia-Pacific Software Engineering Conference (APSEC) 2015
- Local Arrangement Chair Asia-Pacific Software Engineering Conference (APSEC) 2015
- Publication Chair India Software Engineering Conference (ISEC) 2015
- Program Committee Member India Software Engineering Conference (ISEC) 2015
- Faculty In-Charge for Office of Alumni Relations at IIITD
- Faculty In-Charge Training and Placements (T&P) at IIITD
- MTech Data Engineering (DE) Program Coordinator at IIITD
- Post Graduate Committee (PGC) member at IIITD
- **Steering Committee Member** for India Software Engineering Conference (ISEC)
- **Steering Committee Member** for Asia-Pacific Software Engineering Conference (APSEC)
- Journal Reviewer Management Information Systems (MIS) Quarterly 2010
- Journal Reviewer Management Information Systems (MIS) Quarterly 2011
- Program Committee Member Asia-Pacific Software Engineering Conference (APSEC) 2011
- Publicity Chair India Software Engineering Conference (ISEC) 2012
- Panel Member at Software Mining 2012 Workshop
- Software Engineering Education Workshop (SEEW) Organizer co-located with (ISEC) 2012
- Program Committee Member, International Symposium on Software Reliability Engineering (ISSRE) 2012
- Program Committee Member Asia-Pacific Software Engineering Conference (APSEC) 2012
- Program Committee Member Big Data Analytics (BDA) 2012
- Finance Chair India Software Engineering Conference (ISEC) 2013
- Program Committee Member India Software Engineering Conference (ISEC) 2013
- Program Committee Member Asia-Pacific Software Engineering Conference (APSEC) 2013
- Program Committee Member Big Data Analytics (BDA) 2013
- Tutorial Chair Big Data Analytics (BDA) 2014
- Social Media Publicity Chair International Conference on Software Engineering (ICSE) 2014
- Journal Reviewer Empirical Software Engineering (EMSE) 2014
- Program Committee Member Asia-Pacific Software Engineering Conference (APSEC) 2014
- Program Committee Member Big Data Analytics (BDA) 2014
- Program Committee Member COMPUTE 2014
- Program Committee Member INDICON 2014
- Invited Speaker Mining Software Repositories (MSR) Asia Summit 2014
- ACM India Eminent Speaker
- Program Committee Member Symposium on Signal Processing and Information Technology (ISSPIT) 2014
- Program Committee Member ICSE Software Engineering Education and Training (ICSE SEET) 2014
- Program Committee Member International Conference on Contemporary Computing (IC3) 2014
- Program Committee Member Mining Software Repositories (MSR) 2014