Faculty Profile of Dr. S. Sarala



Dr. S. Sarala Assistant Professor Department of Computer Applications

Email:sarala@buc.edu.in

Research Area

- Software Testing
- Software Engineering
- Data Structures
- Compiler Design
- Object Oriented Programming Concepts

Education

Ph. D.

Subject: ******

Year of Award: ****

M.Phil., / PGDCA / *****

Subject : *********

Affiliated University: ************ University

Year of Award: ****

M. Sc., / M.Com., / M.B.A. / M.A. / M.S.W

Subject: *******

Institution: ******, *********

Year of Award: ****

B. Sc., / B.Com / B.C.A. / B.A / B.B.A / B.S.W

Subject: ******

Institution: *******

Affiliated University: ******** University

Year of Award: ****

Career

At Bharathiar University (Reverse Order)

Professor: August 2018 to Till Date

Associate Professor : August 2015 to August 2018 Assistant Professor : April 2005 to August 2015

Past Experience

11111111111: 2222222 to 2222222 at 3333333, 444444444, 55555555 111111111111: 2222222 to 2222222 at 3333333, 444444444, 55555555 111111111111: 2222222 to 2222222 at 3333333, 4444444444, 55555555

Awards

Membership

Visits

Collaborators

Others

Funded Projects (National Level)

- Ongoing
- Completed

Ongoing Projects List with necessary Information Completed Projects List with necessary Information

Consultancy Projects

- Ongoing
- Completed

Ongoing Consultancy Project Informations Completed Consultancy Project Informations

- Post Doc.
- Ph.D.

- M.Phil.
- M.Sc.

Ongoing

Title

Name

Completed

Title

Name

Ongoing

Sl. No.: 1

Name of the candidate :Rahib.B

Title of the Thesis: A More Precise and Pragmatic Optimization Algorithm for

Partial Redundancy Elimination of Common Subexpressions

Status: Synopsis Submitted

Year: 2007

Completed

Sl. No.: 1

Name of the candidate :Beena R

Title of the Thesis: Dynamic Approaches for Test case Optimization in

Regression Testing

Year: 2015

SI. No.: 2

Name of the candidate : Mythili S

Title of the Thesis :Detection of clone in Programming Language Paradigms

and Model Driven Architecture

Year: 2015

SI. No.: 3

Name of the candidate : Abdul Jabbar P

Title of the Thesis: Enhanced Algorithms for Software Complexity metrics in

Object Oriented Programming

Year: 2015

SI. No.: 4

Name of the candidate : Angel S

Title of the Thesis: Analysis of Object Oriented code clone detection

Year: 2018

Ongoing

Sample Data.

Completed

SI. No.:1

Name of the candidate :Priyadharshini V

Title of the Thesis: Optimization Code Reusability for Mobile Application with

Test case Generation

Year: 2011

SI. No.: 2

Name of the candidate: Uma Devi M

Title of the Thesis: Handling the Residual and Inherent Risks by matrix

techniques Year: 2011

Sl. No.:3

Name of the candidate: Kavitha S

Title of the Thesis: Translation of Tamil and English Languages using word

Paradigm Approach

Year: 2012

SI. No.:4

Name of the candidate: Mahalakshmi K

Title of the Thesis: Visual quality Estimation of Video using Specification based

Test Case Generation

Year: 2012

SI. No.:5

Name of the candidate :Deepika M

Title of the Thesis: An Integrated Performance of Clone Detection and Removal

using Refactoring patterns in C# Applications

Year: 2014

Sl. No.:6

Name of the candidate :Indumathi D

Title of the Thesis: Partitioned Block based Approach in Adaptive Random

Testing and Test case Generation using Matrix

Year: 2014

SI. No.: 7

Name of the candidate : JacqulineShirly LS

Title of the Thesis: A Linear based Approach for Detection of Potential Dead

locks in Large scale Multithreaded Programs

Year: 2015

SI. No.: 8

Name of the candidate : Nithya J

Title of the Thesis: Enhanced Project Scheduling by using Dynamic Proxy based

Project Scheduler

Year: 2015

SI. No.:9

Name of the candidate :Shanmugadevi S

Title of the Thesis: Automated INCOUP Tools for Coupling based Integration

Testing

Year: 2015

Ongoing

Sample Data.

Completed

Sample Data.

- International
- National
- Patents
- Conferences
- Books / Chapters
- <u>Database</u>

Reverse Chronological Order

2021

2020-2011

18. A Refinement on E-Path Partial Redundancy Elimination Sarala S. and Rahibb International Journal of Recent Technology and Engineering, BEIESP, Scopus Indexed Journal, ISSN: 2277-3878,India, Vol.8, pp. 1-5, 2019. 17.Pros and Cons of Partial Redundancy Elimination Algorithm Sarala S. and Rahibb

International Journal of Research in Advent Technology and Engineering, BEIESP, Scopus Indexed Journal, ISSN: 2321-9637, India, Vol.1, pp. 89-93, 2019.

16.Regression Test Case Minimization Using Cyclomatic Complexity, S.Saralaand R.Beena International Journal of Applied Engineering Research (IJAER), Vol-9, no.24, pp.109-123, Jan-2014, ISSN :0973-4562, Scopus Index.

15.Bi-objective Test Case Selection using Abstract Syntax Tree and Tree Matching Algorithm"

S.Saralaand R.Beena,

International Journal of Software Engineering and its Applications (IJSEIA), vol. 9, no. 4, pp. 53-66, ISSN: 1738-9984, Scopus Index.

14. "An Efficient Specific Update Search Domain based Glowworm Swarm Optimization for Test Case Prioritization",

S.Saralaand R.Beena

International Arab Journal of Information Technology, ISSN: 2309-4524, Science Citation Index.

13. "Multi-objective Test Case Minimization Collaborated with Clustering and Minimal Hitting Set",

S.Saralaand R.Beena

Journal of Theoretical and Applied Information Technology (JATIT), vol. 69, no. 1, pp. 200-210, 2014, ISSN: 1992-8645, Scopus Index.

12. "Code Coverage based Test Case Selection and Prioritization", S.Saralaand R.Beena International Journal of Software Engineering and Applications (IJSEA), vol. 4, no. 6, pp. 39 – 49, Nov. 2013, ISSN: 0975-9018.

11. "Implication of clone detection and refactoring techniques using delayed duplicate detection refactoring",

S.Sarala and M. Deepika

International Journal of Computer Applications, Vol.93, no.6, pp.5-10, 2014.

10. "Fragment Analysis and Test Case Generation using F-Measure for Adaptive Random Testing and Partitioned Block based Adaptive Random Testing",

S.Sarala and D. Indhumathi International Journal of Computer Applications, Vol-1,pp. 85-92, 2013.

9."A Novel Weight Assignment method to identify clones in Diagrams", S.Saralaand Mythili S International Journal of Applied Engineering Research, Vol.14, pp.253-263, ISSN: 0973-4562, Indexed by Scopus.IF:

8."A Measurement of Similarity to identify Identical Code Clones using Hierarchical Clustering",

S.Saralaand Mythili S.

International Arab Journal of Information Technology, ISSN:2309-4524,IF: 0.582,Science Citation Index..

7. "Efficient Weight Assignment Method for Detection of Clones in State Flow Diagrams",

S.Saralaand Mythili S.

International Journal of Software Engineering Research and Practices, vol.4, no.2, pp. 12-16, ISSN: 2231-2048.If.0.35

6. "Detection of Recurring Clones Using Weighted Frequent Itemset Mining", S.Saralaand Mythili S.

International Journal of Software Engineering and its Applications Vol. 8, no.7, pp. 159 - 176, ISSN: 1738-9984, Scopus Index.If.0.762

5.'A Language Independent Approach for Method Level Clone Detection Using Fingerprinting',

S.Saralaand Mythili S.

International Journal of Advanced Research in Computer Science, Vol.3, no.2, pp. 368-371, ISSN: 0976-5697.If.2.315.

4.'Information Flow Metrics Analysis in Object Oriented Programming and Metrics Validation Process by RAA Algorithm',
S.Sarala and Abdul Jabbar
Journal ofAdvances in Engineering Software
Elsevier Publication, pp. 30-37, 2012. If.1.402

3.'A Study on Penetration Testing', Sarala S. and S. Angel International Journal of Advanced Research in Computer Science Vol-2, No.5, pp.396-398.IF.2.315

2.'Advanced Information Flow Metrics and Complexity Measurement', Sarala S. and Abdul Jabbar P International Journal of Computer Applications New York, USA, Vol. 2, pp. 29-33.IF.0.814

1.'Algorithms for Defect Detection in Object Oriented Programs'
Sarala S. and Valli S
Information Technology Journal, Asian Network for Scientific Information,
Vol. 5, No. 5, pp. 876-883.

National Publications - Reverse Chronological Order

2021

2020-2011

1. Algorithms for Defect Detection in Console Based Applications in C#

Sarala S and Valli S The ICFAI Journal of Systems Management ICFAI University Press, India, pp. 46-55.

Patent Info

Conference Info

Books Editor in Year Wise

1. 'Enhanced Rule Accuracy Algorithm for Validating Software Metrics' Sarala S.and Abdul Jabbar Communications in Computer and Information Science, Book Chapter in Springer Verlag, Vol.305, pp.406-412.

Chapter Editor in Year Wise

Accordion content 2.

Database Related Info