Faculty Profile of Dr. T. Amutha



Dr. T. Amutha Associate Professor Department of Computer Applications

Email:amudhaswamynathan@buc.edu.in

Phone No:0422 2428348

Mobile No:+91 9790002244

Research Area

- Bio-inspired Algorithms
- Artificial Intelligence
- Agent Based Computing

Education

Ph.D.

Subject : Computer Science

Institution: Bharathiar University, Coimbatore Affiliated University: Bharathiar University

Year of Award: 2013

M.Phil.,

Subject: Computer Science

Institution: Bharathidasan University

Affiliated University: Bharathidasan University

Year of Award: 2005

UGC - NET for Lectureship

Year of Award: 2003

Register Number: N091590

M.C.A.,

Subject: Computer Applications

Institution: Nehru Memorial College, Puthanampatti

Affiliated University: Bharathidasan University

Year of Award: 1999

B.Sc.,

Subject: Physics

Institution: Sri Sarada Niketan College for Women, Karur

Affiliated University: Bharathidasan University

Year of Award: 1995

Career

At Bharathiar University (Reverse Order)

Associate Professor : April 2005 to Till Date

Past Experience

Lecturer: June 2001 to April 2005 at Dr. GRD College of Science, Coimbatore

Lecturer : August 1999 to June 2001 at VLB Janakiammal College of Arts &

Science, Coimbatore

Awards

Academic awards

Sl. No.: 1

Awarding agency: MHRD, Govt of India

Country: India

Purpose of award: Best Volunteer Award for VISAKA

Date of Award: March 2016

SI. No.: 2

Awarding agency: Amity University

Country: Dubai

Purpose of award: Best Paper Award

Date of Award: Feb 2019

SI. No.: 3

Awarding agency: Bharathiar University

Country: India

Purpose of award: Appreciation award for NIRF Coordination

Date of Award: March 2019

Membership

Membership in Professional Bodies

Sl. No.: 1

Organization: IEEE

Type of Membership: Member

Period: 2012-till date

SI. No.: 2

Organization: IEEE Computational Intelligence Society

Type of Membership: Member

Period: 2011-2013

SI. No.: 3

Organization: ACM

Type of Membership: Member

Period: 2015 - till date

SI. No.: 4

Organization: Computer Society of India [CSI]

Type of Membership: Life Member

Period: 2006 - till date

SI. No.: 5

Organization: International Association for Engineers [IAENG]

Type of Membership: Life Member

Period: 2010 - till date

SI. No.: 6

Organization: Indian Science Congress [ISCA]

Type of Membership: Member

Period: 2015-2019

SI. No.: 7

Organization: International Association of Computer Science and Information

Technology [IACSIT]

Type of Membership: Member

Period: 2010-till date

Visits

Sl. No.: 1

Countries Vistes: Dubai

Duration of Visit : 4 days Month and Year : Feb 2019

Purpose of Visit: To attend & present a paper in the International conference

on Artificial Intelligence at Amity University, Dubai

Collaborators

Others

Funded Projects(National Level)

- Ongoing 02
- Completed 02

1. UGC

Title of the project : Development of an efficient bio-inspired, agent based algorithmic technique for dynamic task allocation in industrial settings

Funding Agency: UGC

Amount: Rs.1.5 Lakhs

Duration: 2011 - 2013

2. RUSA-BEICH

Title of the project : Design of novel cropping patterns for yield maximization and ecology conservation using swarm intelligent techniques

Funding Agency: RUSA-BEICH

Amount: Rs. 2020 - 2021

Duration: Rs.6 Lakhs

1. RUSA-BCTRC

Title of the project : Development of Pervasive Healthcare System through Environmental Monitoring

Funding Agency: RUSA-BCTRC

Amount: Rs. 4.3 Lakhs

Duration: 2021 - 2023

2. BU & ICMR-VCRC

Title of the project : Development of an image based identification of tick species using artificial intelligence (AI) - An alternative tool to the conventional taxonomy

Funding Agency: BU & ICMR-VCRC

Amount: Rs. 6 Lakhs

Duration: 2021 - 2023

Consultancy Projects

- Ongoing
- Completed

- Post-Doc
- Ph.D
- M.Phil
- M.Sc

Ongoing

Candidate Name

Date of Award:

Awarded

Candidate Name

Date of Submission:

Date of Award:

Ongoing

Manurajan Nair

Title of the Thesis: PROPHETESS: A standalone tool for Prophage Loci presiction in bacterial genomes using Particle Swarm Optimization Date of Submission:

Date of Award:

Yesodha R.

Date of Submission:

Date of Award:

Sangeetha A.

Deepan Babu P

Date of Submission:

Date of Award:

Arokiaraj S.

Date of Submission:

Date of Award:

Hashni T.

Date of Submission:

Date of Award:

Awarded

Sl. No.: 1

Name of the candidate: M. Sakthi Asvini

Title of the Thesis: Design and Development of a Novel Reservoir Optimization

Framework based on Strawberry Algorithm

Year: 2019

Sl. No.: 2

Name of the candidate: N.Thilagavathi

Title of the Thesis: Design and Development of an Effective Bio-inspired

Methodology for Crop Planning Optimization

Year: 2020

Ongoing

Accordion content 1.

Awarded

SI. No.: 1

Name of the candidate: V Sathya

Title of the Thesis: Design and development of meeting scheduler using Java

Agent Development Environment

Year: 2007

Sl. No.: 2

Name of the candidate: D Christy Jemima

Title of the Thesis: An automated tool for visualizing and analyzing class level

synthesis in C++ language

Year: 2008

Sl. No.: 3

Name of the candidate: M Geetha

Title of the Thesis: A Multiagent coordination framework for organ

transplantation system using improved Stigmergy

Year: 2008

Sl. No.: 4

Name of the candidate: K Vijaya krishnakumari

Title of the Thesis: An Agent based architecture of message filtering using

spam filtering techniques: A receiver driven approach

Year: 2008

SI. No.: 5

Name of the candidate: G Nalini

Title of the Thesis: Detection and prevention of distributed denial of service

attacks using OOAD heuristics

Year: 2008

SI. No.: 6

Name of the candidate: Meena Unni

Title of the Thesis: A comparative study of Object Oriented Design Heuristics

Year: 2008

SI. No.: 7

Name of the candidate: N Saritha

Title of the Thesis: A multiagent based framework for dynamic matchmaking

service using middle agent approach

Year: 2010

Sl. No.: 8

Name of the candidate: Manu Rajan Nair

Title of the Thesis: A network-wide file search solution using agent based peer-

to-peer systems

Year: 2008

Sl. No.: 9

Name of the candidate: P Usha

Title of the Thesis: Implementation and Performance Evaluation of Content

filtering techniques using Multi-agent architecture

Year: 2010

Sl. No.: 10

Name of the candidate: Lisha

Title of the Thesis: Analytical study and Implementation of OOD patterns to

address design issues in soccer game environment

Year: 2010

Sl. No.: 11

Name of the candidate: P Loganayaki

Title of the Thesis: Implementation of Artificial Bee Colony Algorithm for

solving Generalized Assignment Problems

Year: 2011

Sl. No.: 12

Name of the candidate: G Annie Sujitha

Title of the Thesis: A Software Agent Framework to overcome Malicious host

threats and uncontrolled Agent clones

Year: 2011

Sl. No.: 13

Name of the candidate : M Divyavani

Title of the Thesis: A Competency Analysis of Ant Colony optimization

clustering and K-Harmonic means clustering techniques

Year : 2011

Sl. No.: 14

Name of the candidate: D Prakash

Title of the Thesis: Comparative Study of ISH and CCF Directed Acyclic Graph

Scheduling Algorithms

Year: 2012

Sl. No.: 15

Name of the candidate: T Hashni

Title of the Thesis: An Improved Nature-inspired Methodology proposed to

solve Quadratic Assignment Problems

Year: 2012

Sl. No.: 16

Name of the candidate: R Yesodha

Title of the Thesis: Implementation of Firefly algorithm to solve Bin Packing

Problem

Year: 2013

Sl. No.: 17

Name of the candidate : D Deepanandhini

Title of the Thesis: Solving Job Shop Scheduling Problems with Consultant

Guided Search Metaheuristics

Year: 2013

Sl. No.: 18

Name of the candidate: P Deepan Babu

Title of the Thesis: A Novel Agent Based Architecture for effective Resource

Negotiation and Job Scheduling in a Grid Environment

Year: 2013

Sl. No.: 19

Name of the candidate: T. T. DhivyaPrabha

Title of the Thesis: Design and Development of QoS Agent Based Frameworks

and Algorithms for Task Scheduling in Grid

Year: 2013

SI. No.: 20

Name of the candidate : N Thilagavathi

Title of the Thesis: Implementation of Rank based ACO to solve 2D HP Protein

Folding Problems

Year: 2014

Sl. No.: 21

Name of the candidate : D Surya Gowri

Title of the Thesis: Edge Detection in Mammogram Images using Ant Colony

Optimization Technique

Year: 2014

SI. No.: 22

Name of the candidate: M.P.Saranya

Title of the Thesis: A Bat-inspired Framework for solving Disaster Inspection

Planning Problem

Year: 2014

Sl. No.: 23

Name of the candidate: M.Sakthi Asvini

Title of the Thesis: Reservoir Release Optimization using Plant Propagation

Algorithm

Year: 2014

Sl. No.: 24

Name of the candidate: A. Krishnaveni

Title of the Thesis: Particle Swarm Optimization based Thresholding for

Mammogram Image Segmentation

Year: 2015

Sl. No.: 25

Name of the candidate : D Kiruthiga

Title of the Thesis: Estimation and Forecasting of Hydropower Generation

Maximization Using Particle Swarm Optimization and Artificial Neural Network

Year: 2016

SI. No.: 26

Name of the candidate: A Sangeetha

Title of the Thesis: A Bio-inspired Methodology for Optimal Estimation and

Forecasting of CO2 Emission in India

Year: 2016

SI. No.: 27

Name of the candidate: N Sivakumar

Title of the Thesis: Development of a Novel Fertilizer Optimization Technique

using Fruit Fly Algorithm

Year: 2018

SI. No.: 28

Name of the candidate: J Christy Martina

Title of the Thesis: Soft Computing Framework for Estimation and Forecasting

of Daily Global Solar Radiation

Year: 2018

Sl. No.: 29

Name of the candidate : C Chitra

Title of the Thesis: Optimal Unit commitment for Thermal Power Systems

using Penguin Search Algorithm

Year : 2019

Sl. No. : 30

Name of the candidate : Tintu George

Title of the Thesis: Genetic Algorithm based multiobjective optimization

framework to solve Travelling Salesman Problem

Year: 2019

Sl. No.: 31

Name of the candidate: Nayana A

Title of the Thesis: A Computational Study on Air Pollution Assessment and

Forecasting in Urban Traffic Areas of Coimbatore City

Year : 2020

Sl. No.: 32

Name of the candidate: Jijitha S

Title of the Thesis: A Systematic Study on Breast Cancer Prediction using

Machine Learning Techniques

Year: 2020

Sl. No.: 33

Name of the candidate: Arivuselvi A.

Title of the Thesis: An Effective Ant Colony Optimization Methodology for

Virtual Machine Placement Cloud Data Center

Year: 2020

Ongoing

Accordion content 1.

Awarded

Sl. No.: 1

Name of the candidate: Navaneethakrishnan A., Bipin M.V., Sivasakth P. Title of the Dissertation: IOT based Automatic Rain Wiper for Automobiles

Year : 2019

SI. No.: 2

Name of the candidate: Monica J., Muthumeenal. L, Nivetha. M, Vinitha.D

Title of the Dissertation: IoT based Smart baby care system

Year: 2019

Sl. No.: 3

Name of the candidate: P.M.Ahash Kanna, S.Alwinsurya, R.Harikrishnan,

A.Elango

Title of the Dissertation: Smart dustbin automation and control

Year: 2019

SI. No.: 4

Name of the candidate: Yuvaraj, Yohoshiva, Praveen, Arun Chandu

Title of the Dissertation : Automated vehicle driving control and navigation

system

Year: 2019

SI. No.: 5

Name of the candidate : Anusree T.R, Athira K.B, Jainy Joy, Ragasree E.R Title of the Dissertation : Arduino based Hand Gesture Control of Computer

Monitor

Year: 2019

SI. No.: 6

Name of the candidate: K.Nandini, K.Jayasree, M.Venugopal Reddy

Title of the Dissertation: Automated IoT based waste management system

Year: 2019

SI. No.: 7

Name of the candidate : Chakridhar Reddy, Tholam Sravani, Kalidindi Vaishnavi

Title of the Dissertation: Smart system for water usage measurement and

billing

Year: 2019

SI. No.: 8

Name of the candidate: Vysnavi A, Kaviya M, Sriram.K, Hemalaxmi.S

Title of the Dissertation : Microcontroller based drowsiness detection in drivers

to prevent accidents

Year: 2019

SI. No.: 9

Name of the candidate : Lavanya J, Manthra K V, Kiran M Title of the Dissertation : Smart Traffic regulation system

Year: 2019

SI. No.: 10

Name of the candidate: P.Dhinakaran, K.Karthikeyan, G.Ajithkumar,

S.Govardhan

Title of the Dissertation : Automated hand gloves for motion detection

Year: 2019

SI. No.: 11

Name of the candidate : Geetu P. Shaji, Tina Babu C., Vishnu K. V. Title of the Dissertation : Ultrasonic glasses for assistance of visually

challenged people

Year: 2019

Sl. No.: 12

Name of the candidate: Sithara P, Mahalakashmi M, Karthikeyani M, Vidhya P

Title of the Dissertation : Automated gas leakage detection system

Year : 2019

Sl. No. : 13

Name of the candidate : M.Sivaraman

Title of the Dissertation : Electrical Shop Management System

Year : 2019

Sl. No. : 14

Name of the candidate: S.Susmitha

Title of the Dissertation: Applying Naïve Bayes Technique for Data Analysis

Year: 2019

Sl. No.: 15

Name of the candidate : S.Mohanapriya Title of the Dissertation : Trade Portico

Year: 2019

Sl. No.: 16

Name of the candidate: R. Harshini

Title of the Dissertation : Student Result Management System

Year: 2019

Sl. No.: 17

Name of the candidate: M.Sowmiya

Title of the Dissertation: Power Prediction

Year: 2019

Sl. No.: 18

Name of the candidate: S.Ragul

Title of the Dissertation: Web Development for Online FM [Frequency Module]

Year: 2019

Sl. No.: 19

Name of the candidate: T.Sangamithra

Title of the Dissertation: Website for Alpha Thread Rolling

Year: 2019

Sl. No.: 20

Name of the candidate: M.Bharathimanivasagam

Title of the Dissertation: Automation Test for AtoZ Groceries Web Application

Year: 2019

SI. No.: 21

Name of the candidate: T.Kaviya

Title of the Dissertation: Bug Tracking System

Year: 2019

Sl. No.: 22

Name of the candidate : S.Jagadheesan

Title of the Dissertation : Development of Flag Quiz Mobile Application Using

Android Year: 2018

Sl. No. : 23

Name of the candidate: M.Jothi Lakshmi

Title of the Dissertation : Android Voting System

Year: 2018

Sl. No.: 24

Name of the candidate: S.Poorani

Title of the Dissertation: Diet Consultant

Year: 2018

Sl. No.: 25

Name of the candidate: P.Muthumeena

Title of the Dissertation: College Event Sharing System

Year: 2018

Sl. No.: 26

Name of the candidate: R.Parvin Begum

Title of the Dissertation: Emergency Alert System and Personal Safety

Application using Android

Year: 2018

SI. No.: 27

Name of the candidate: G.Nesamalar

Title of the Dissertation: Development of Online System for Entry and

Retrieval of Internal Assessment Marks

Year: 2018

Sl. No.: 28

Name of the candidate: S.Krishnaraj

Title of the Dissertation : Web Based Smart Audit System

Year: 2017

Sl. No.: 29

Name of the candidate: L.Kalaiselvi

Title of the Dissertation : Vehicle Sharing Application for Environmental

Pollution Reduction

Year: 2017

Sl. No.: 30

Name of the candidate: G.Karthika

Title of the Dissertation: Design and Development of Web Portal for Sai

Sourcing Service

Year: 2017

SI. No.: 31

Name of the candidate: C.Karthick

Title of the Dissertation : Decoration Management System

Year: 2017

Sl. No.: 32

Name of the candidate : S.Karuppudurai Title of the Dissertation : Legend World

Year: 2017

Sl. No.: 33

Name of the candidate: K.Keerthana

Title of the Dissertation: Mobile Applications for Thirukkural

Year: 2017

SI. No.: 34

Name of the candidate: M.Maneesha

Title of the Dissertation : Key Management System

Year: 2016

Sl. No.: 35

Name of the candidate: S.Krishnaraj

Title of the Dissertation: Case Study on Vehicle Monitoring System

Year: 2016

Sl. No.: 36

Name of the candidate: G.Karthika

Title of the Dissertation: Online Bus Pass Registration and Renewal System

Year: 2016

Sl. No.: 37

Name of the candidate : M.Kathiresan

Title of the Dissertation : Stationary Management System

Year: 2016

Sl. No.: 38

Name of the candidate: P.Kumaresan

Title of the Dissertation : Case Study on Tea Factory Management

Year: 2016

Sl. No.: 39

Name of the candidate: L.Kalaiselvi

Title of the Dissertation: Feedback Report-Generation and Visualization

Year: 2016

SI. No.: 40

Name of the candidate: C.Karthick

Title of the Dissertation : A Study on Mobile Applications used for Education

Year: 2016

SI. No.: 41

Name of the candidate : K.Keerthana Title of the Dissertation : Kovai City

Year: 2016

Sl. No.: 42

Name of the candidate: S.Gomathi

Title of the Dissertation: Backup and Recovery in Oracle and SQL

Year: 2015

Sl. No.: 43

Name of the candidate: A.Karthika

Title of the Dissertation: Safe and Secure Internet Banking System

Year: 2015

Sl. No.: 44

Name of the candidate: B.Keerthiga

Title of the Dissertation: Placement Consultancy Management System

Year: 2015

Sl. No.: 45

Name of the candidate: S.Gayathri

Title of the Dissertation: Industrial Manpower Resource Organizer

Year: 2015

Sl. No.: 46

Name of the candidate: A.Kumaresan

Title of the Dissertation : GK Fabs Order Management System

Year: 2015

SI. No.: 47

Name of the candidate: K.Karthikeyan

Title of the Dissertation: E-Governance - Department of Computer Applications

- Students Module

Year: 2015

Sl. No.: 48

Name of the candidate: V.Ramya

Title of the Dissertation: E-Governance - Department of Computer Applications

- Faculty Module

Year: 2015

Sl. No.: 49

Name of the candidate: R.Kumar

Title of the Dissertation: E-Governance - Department of Computer Applications

- Examination Module

Year : 2015

SI. No.: 50

Name of the candidate: P.Jaya Bharathi

Title of the Dissertation: E-Governance - Department of Computer Applications

- Reports Module

Year : 2015

- International
- National
- Patents
- Conferences
- Books/Chapters
- Database

Reverse Chronological Order

2021

41. An effective ant colony optimization methodology for virtual machine placement in cloud data centre

A. Arivuselvi, T. Amudha, P. Deepan Babu

Turkish Journal of Computer and Mathematics Education, 12(10), 3460-3467

(2021).

40. A particle swarm optimization methodology to design an effective air quality monitoring network

A. Sangeetha, T. Amudha

Environment, Development and Sustainability, 23(3), (2021)

- 39. A novel agent-based methodology for job scheduling in cyber physical systems
- P. Deepan Babu, T. Amudha, S. Ramakrishnan Lecture Notes in Networks and Systems, Springer, 166 (2021)

2020

38. Prophage loci predictor for bacterial genomes

Manu Rajan Nair, T. Amudha Journal of Bioinformatics and Computational Biology (2020)

2019-2004

37. A novel methodology for optimal land allocation for agricultural crops using social spider algorithm

N. Thilagavathi, T. Amudha

PeerJ 7:e7559 (2019)

- 36. <u>Breast cancer prognosis using machine learning and genetic algorithm:</u> experiment on six different datasets
- S. Jijitha and T. Amudha

Evolutionary Computing and Mobile Sustainable Networks, Springer 53, 703 – 711 (2020)

35. <u>Genetic algorithm based multi objective optimization framework to solve</u> travelling salesman problem

Tintu George and T. Amudha

Algorithms for Intelligent Systems, Springer, 141-151 (2020)

34. <u>Enhancement of firefly technique for effective optimization of multi-depot</u> vehicle routing

R. Yesodha, T. Amudha International journal of Innovative Technology and Exploring Engineering, 8(11), 2346-2353 (2019)

33. Optimal unit commitment for thermal power systems using penguin search algorithm

C.Chitra, T. Amudha

Learning and Analytics in Intelligent Systems, Springer 3, 581 – 591 (2020)

- 32. An appraisal on assortment of optimization factors in cloud computing environment
- P. Deepan Babu, T. Amudha Learning and Analytics in Intelligent Systems, Springer 3, 621 – 631 (2020)
- 31. <u>A computational study on air pollution assessment modelling</u>
 A.Nayana, T. Amudha
 Lecture Notes in Networks and Systems, Springer 56, 463-470 (2018)
- 30. A soft computing methodology for estimation and forecasting of daily global solar radiation
- J. Christy Martina, T. Amudha Advances in Intelligent Systems and Computing, Springer 847, 235-246 (2018)
- 29. <u>Hydropower generation optimization and forecasting using PSO</u>D. Kiruthiga, T. AmudhaAdvances in Intelligent Systems and Computing, Springer 711, 411-421(2018)
- 28. <u>A novel bio-inspired framework for CO2 emission forecast in india</u>
 A.Sangeetha and T. Amudha
 Elsevier Procedia Computer Science 125, 367-375 (2018)

27. Bio-inspired Swarm Intelligence Algorithms – A systematic analysis

Manu Rajan Nair, T Amudha

International Journal of Applied Engineering Research, 12(24), 13981-13989, (2017)

26. <u>Design and development of bio-inspired framework for reservoir operation</u> optimization

M. S. Asvini and T. Amudha

Elsevier - Advances in Water Resources 110, 193-202, (2017)

25. An analysis of global solar radiation estimation techniques

J. Christy Martina, T. Amudha

International Journal of Engineering Technology Science and Research, 4(8), (2017)

24. <u>An efficient methodology for reservoir release optimization using plant</u> propagation algorithm

M. Sakthi Asvini, T. Amudha

Elsevier Procedia Computer Science 93, 1061 - 1069, (2016)

23. An effective bio-inspired methodology for optimal estimation and forecasting CO2 emission in India

A.Sangeetha, T. Amudha

Advances in Intelligent Systems and Computing, Springer 424, 481 – 489 (2016)

22. Optimal reservoir release for hydropower generation maximization using particle swarm optimization

D. Kiruthiga, T. Amudha

Advances in Intelligent Systems and Computing, Springer 424, 577 – 585 (2016)

21. Role of bio-inspired optimization in disaster operations management research

R. Dhveya, T. Amudha

Advances in Intelligent Systems and Computing, Springer 424, 565 – 575 (2016)

20. A Study on Bio-inspired Metaheuristics for solving Vehicle Routing Problem

R Yesodha, T Amudha

Indian Journal of Science and Technology, 8(25), IPL0400, (2015)

19. ACO - metaheuristic for 3D-HP protein folding optimization

N. Thilagavathi, T. Amudha

ARPN Journal of Engineering and Applied Sciences, 10(11), 4948 – 4953, (2015)

- 18. Parameter optimization and its impact on scheduling solutions
- T. Amudha, B.L. Shivakumar

Smart Innovation, Systems and Technologies -Springer,1(31), 469-477, (2015)

- 17. Rank based ant algorithm for 2D HP protein folding
- N. Thilagavathi, T. Amudha

Smart Innovation, Systems and Technologies -Springer, 3(33), 441-452, (2015)

- 16. A novel genetic algorithm for effective job scheduling in grid environment
- P. Deepan Babu, T. Amudha

Advances in Intelligent Systems and Computing 246, Springer (2014).

- 15. Design and development of agent based architecture for effective resource utilization in a grid environment
- P. Deepan Babu, T. Amudha

Oriental Journal of Computer Science and Technology, 6(2), 167-177, (2013).

14. Effectiveness of firefly algorithm in solving bin packing problem

R Yesodha, T Amudha

International Journal of Advanced Research in Computer Science and Software Engineering, 3(5), 1003 -1010, (2013).

13. Enhanced bacterial foraging for permutation flow shop scheduling problems

B L Shivakumar, T Amudha

ARPN Journal of Engineering and Applied Sciences (2013)

12. Solving job shop scheduling problems with consultant guided search metaheuristics

D Deepanandhini, T Amudha International Journal of Software and Web Sciences (2013)

11. A comparative study on heuristic procedures to solve bin packing problems R Yesodha, T Amudha International Journal in Foundations of Computer Science & Technology, 2(6),

10. Bio-inspired metaheuristics for bin packing problems

R Yesodha, T Amudha

(2012)

International Journal of Emerging Technologies in Computational and Applied Sciences, 2(1), 63-67, (2012)

- 9. A hybrid bacterial foraging algorithm for solving job shop scheduling problems
- S. Narendhar, T. Amudha International Journal of Programming Languages and Applications, 2(4), (2012)
- 8. <u>An improved bio-inspired methodology to solve flow shop scheduling</u> problems
- P. Divya, T. Amudha, S. Narendhar International Journal of Management, IT and Engineering, 2(10), 610 – 626, (2012)

7. Improving the solution quality of quadratic assignment problems using harmony improvised consultant guided search technique

T.Amudha , B.L. Shivakumar International Journal of Scientific & Engineering Research, 3(8), (2012)

6. <u>An ant inspired bacterial foraging methodology proposed to solve open shop</u> scheduling problems

V. Ravibabu, T.Amudha International Journal of Advanced Research in Computer Science and Electronics Engineering, 1(5), 59 – 66, (2012)

5. A hybrid bacterial swarming methodology for job shop scheduling environment

B.L.Shivakumar, T.Amudha Global Journal of Computer Science and Technology (A) Hardware & Computation, 12(10), 7-16, (2012)

- 4. A software agent framework to overcome malicious host threats and uncontrolled agent clones
- G. Annie Sujitha, T. Amudha International Journal of Advanced Information Technology, 2(2), 13-27, (2012)
- 3. <u>Solving quadratic assignment problems using a hybrid nature-inspired</u> technique
- T. Hashni, T.Amudha International Journal of Current Research, 4(2), 216-221, (2012)
- 2. <u>Comparing the clustering efficiency of ACO and K-harmonic means techniques</u>

M.Divyavani, T. Amudha International Journal of Computer Science, Engineering and Applications,1(4),(2011)

1. A competency analysis of ant colony optimization and k-harmonic means clustering algorithm

M.Divyavani, T.Amudha

International Journal of Advanced research in Computer Science, 2(4), (2011)

Books Edited Year Wise

Accordion content 1.

Chapter Edited Year Wise

Book Chapters

1. A novel bio-inspired optimization framework for effective crop land allocation and utilization

N. Thilagavathi, S. Ramakrishnan and T. Amudha IEEE Xplore, 182-187 (2021)

2. A computational study on the effect of climatic parameters on air pollution in coimbatore city

A.Sangeetha and T. Amudha IEEE Xplore, 66-71 (2019)

3. <u>Design of multireservoir framework for optimal reservoir release using</u> nature-inspired algorithm

M. S. Asvini and T. Amudha IEEE Xplore, 119-123 (2019)

4. Pervasive healthcare system based on environmental monitoring
A.Sangeetha and T. Amudha
Intelligent Pervasive Computing Systems for Smarter Healthcare

Intelligent Pervasive Computing Systems for Smarter Healthcare, Wiley Publishers, 159-178 (2019)

5. Development of a novel bio-inspired framework for fertilizer optimization

N.Sivakumar, T. Amudha, N. Thilagavathi IEEE Xplore, 175-181 (2019)

- 6. An improved firefly algorithm to solve capacitated vehicle routing problem
- R. Yesodha, T. Amudha IEEE Xplore, 163-169 (2019)
- 7. Crop planning optimization with social spider optimization algorithm
- S. Saranya, T. Amudha IEEE Xplore, 776 – 781, (2017)
- 8. Computational perspective on organic farming a survey
- N. Thilagavathi, T. Amudha, N.Sivakumar IEEE Xplore, (2017)
- 9. A roadmap to digital india initiatives
 A.Sangeetha, M. Sakthi Asvini, T. Amudha
 Recent Trends in Management and Computer Applications, 1, 78 84, (2017)
 ISBN: 978-93-85977-88-6
- 10. <u>A bat-inspired framework for optimization of disaster inspection planning</u> M.P.Saranya, T. Amudha IEEE Xplore, (2017)
- 11. <u>A study on estimation of CO2 emission using computational techniques</u>
 A.Sangeetha, T. Amudha
 IEEE Xplore, 244 249, (2016)
- 12. Crop planning optimization research a detailed investigation
- S. Saranya, T. Amudha IEEE Xplore, 202 – 208, (2016)
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