# Faculty Profile of Dr. M. Punithavalli



Dr. M. Punithavalli Professor & Head Department of Computer Applications

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# **Research Area**

- Machine Learning
- Software Engineering
- Cyber Security

# **Education & Career**

# **Education**

#### Ph.D.

Subject: Computer Science

Institution: Alagappa University

Affiliated University: Alagappa University

Year of Award: 2007

# M.Phil.,

Subject : Computer Science

Institution : Sri Vasavi College, Erode

Affiliated University: Bharathiar University

Year of Award: 2000

## M.Sc.,

Subject: Computer Science

Institution: Avinashilingam Institute for Home Science and Higher Education

forWomen

Affiliated University: Avinashilingam Deemed University

Year of Award: 1994

#### B.Sc.,

Subject: Computer Science

Institution: Dr. G.R.Damodaran College of Science

Affiliated University: Bharathiar University

Year of Award: 1991

#### Career

# At Bharathiar University (Reverse Order)

Professor: April 2018 to Till Date

Associate Professor: April 2015 to May 2018

## **Past Experience**

Dean: December 2013 to April 2015 at Sri Ramakrishna College of Arts and

Science for women, Coimbatore

Director, MCA: August 2011 to December 2013 at Sri Ramakrishna

Engineering College, Coimbatore

Director, MCA: September 2010 to August 2011 at Dr. SNS Rajalakshmi

College of Arts and Science, Coimbatore

Director, MCA: June 2007 to September 2010 at Sri Ramakrishna College of

Arts and Science for Women, Coimbatore

Assistant Professor & Head: July 2003 to June 2007 at Sri Ramakrishna College of Arts and Science for Women, Coimbatore

Lecturer & Head: November 2001 to June 2003 at Sri Ramakrishna College

of Arts and Science for Women, Coimbatore

Lecturer: July 1995 to October 2001 at Sri Ramakrishna College of Arts and

Science for Women, Coimbatore

# Awards

# **Academic awards**

Sl. No.: 1

Awarding agency: National Foundation for Entrepreneurship Development

Country: India

Purpose of award: Senior Woman Educator & Scholar Award

Date of Award: 08.03.2014

# Membership

# Membership in Professional Bodies

Sl. No.: 1

Organization: Computer Society of India

Type of Membership : Member

Period : Life time Member

# Membership in Academic Bodies

Sl. No.: 1

Organization: Bharathiar University (Affiliated Colleges), Nirmala College, PSGR Krishnammal College for Women, NGM College, CMS College Bharathiar University (University Department), Hindusthan College of Arts and Science, Dr. NGP College of Arts and Science, Dr. SNS Rajalakshmi College of Arts and Science

Type of Membership: Chairman / Member Board of Studies

Period: 2007, 2007, 2009, 2007, 2007, 2007, Since 2015, 2015, 2015, 2015

SI. No.: 2

Organization: Anna University, Annamalai University, NGM College,

Bharathidhasan University, Avinashilingam University

Type of Membership: Chairman/ Member, Question Paper Setting Board

Period: 2008, 2016, 2016, 2018, 2019

Sl. No.: 3

Organization: Mother Teresa University, Dravidan University, Noorul Islam

University, Rayalaseema University, Jain University

Type of Membership: Examiner - Ph.D Viva Voce

Period: 2014, 2017, 2018, 2020, 2017

Sl. No.: 4

Organization: Ph.D Scholar's Selection-Bharathiar University
Type of Membership: Chairman/ Member Selection Committee

Period: Since 2008

SI. No.: 5

Organization: Bharathiar University

Type of Membership: Chairman/ Member Experts committee

Period: Since 2007

SI. No.: 6

Organization: Sri Ramakrishna College of Engineering

Type of Membership: Member Academic Council

Period: 2011

#### **Visits**

#### **Collaborators**

## **Others**

# **Projects**

Funded Projects (National Level)

- Ongoing
- Completed-02

Ongoing Projects List with necessary Information

# 1. University Grants Commission

Stress management tool
M. Punithavalli
University Grants Commission
2014-2016
Rs.1.7 Lakhs

# 2. RUSA 2.0 - BEICH

Ground water preservation against soil contamination using machine learning algorithms

M. Punithavalli

RUSA 2.0 - BEICH

2020

6.00 lakhs

# **Consultancy Projects**

- Ongoing
- Completed

Ongoing Consultancy Project Informations
Completed Consultancy Project Informations

## **Research Guidance**

- Post Doc.
- Ph.D.
- M.Phil.
- <u>M.Sc.</u>

# Ongoing

Title

Name

# Completed

Title

Name

# Ongoing

## K Chinnathambi

Title of the Thesis : Prediction of Groundwater Level and Groundwater Pollution using Datamining Technique.

Status: Ongoing

# **Nisha Varghese**

Title of the Thesis: Design and Development of Neural Macine Reading Comprehension using Deeplearning Transformer Models Status:Ongoing

# Completed

Sl. No.: 1

Name of the candidate: Manju S

Title of the Thesis: Ideation Learning to enhance Intelligent Agent E -

Brainstorming using Neural Network

Year: 2016

SI. No.: 2

Name of the candidate: Balagi N V

Title of the Thesis: Design and development of an algorithm object detection

based on machine learning and multiple resolution features

Year : 2016

SI. No.: 3

Name of the candidate: K. Shanthi

Title of the Thesis: Effective approaches DSR routing in MANET

Year : 2016

SI. No.: 4

Name of the candidate : Vijayalakshmi S

Title of the Thesis: Extended Techniques to enhanced DBSCAN algorithm

using optimized nearest neighbor and pruning procedure

Year: 2015

SI. No.: 5

Name of the candidate: Mary Shyla E

Title of the Thesis: Integrated Face Recognition System of Variant Facial

**Expression and Color** 

Year : 2015

SI. No.: 6

Name of the candidate: Vijayalakshmi S

Title of the Thesis: Extended Techniques to enhanced DBSCAN algorithm

using optimized nearest neighbor and pruning procedure

Year : 2015

SI. No.: 7

Name of the candidate: Sathyavathy G

Title of the Thesis: Secure message transmission for image steganography

in peer to peer routing

Year: 2014

SI. No.: 8

Name of the candidate: Neela Megam C

Title of the Thesis: Enhanced ensemble prediction algorithm for detecting

model in object oriented system using quality matrix

Year : 2014

SI. No.: 9

Name of the candidate: Rani V, G

Title of the Thesis: Combined weight based on secured cluster head

selection algorithm

Year:

SI. No.: 10

Name of the candidate: Rosiline Jeetha B

Title of the Thesis: Approaches to partition medical data using enhanced

algorithm Year : 2013

Sl. No.: 11

Name of the candidate: Ravichandran R

Title of the Thesis: An investigation on improving process capability of defined level software companies in respect of effort and schedule devotions

Year : 2013

SI. No.: 12

Name of the candidate: Maheswari K

Title of the Thesis: A pocket loss replacement techniques for Secured data

delivery in voice over internet protocol

Year : 2013

Sl. No.: 13

Name of the candidate: R.V Shiva Balan

Title of the Thesis: Web Service Rank Determination Using A Novel

Integration Framework

Year : 2012

SI. No.: 14

Name of the candidate: K. Ananda Kumar

Title of the Thesis: Investigation on cancer classification using neural

network algorithm expression of very few genes

Year : 2012

SI. No.: 15

Name of the candidate: Koamala Lakshmi

Title of the Thesis: Design and execution of skeleton tracking algorithm for

2D space representation

Year: 2012

# Ongoing

Sample Data.

# Completed

SI. No.: 1

Name of the candidate: J. DIVYA BHARATHI

Title of the Thesis: Improved Resource Allocation Algorithms for Cloud

Year: 2017

SI. No.: 2

Name of the candidate: V. AKILA

Title of the Thesis: Stress Level Analyzer using Fuzzy Rule Mining

Year: 2014

SI. No.: 3

Name of the candidate: S.SARANYA

Title of the Thesis: An Efficient Centroid Selection Algorithm for K-mean

Clustering Year : 2009

SI. No.: 4

Name of the candidate: A.ANITHA

Title of the Thesis: Media Crossing to Media Mining

Year: 2007

SI. No.: 5

Name of the candidate: S. VIJAYALAKSHIMI

Title of the Thesis: Location based broadcast protocol for MANET using Data

Mining Techniques

Year: 2003

SI. No.: 6

Name of the candidate: E. NIRMALA RAJESWARI

Title of the Thesis: Content Based Image Classified and Retroviral using

Data Clustering Techniques

Year: 2003

# Ongoing

Sample Data.

# Completed

SI. No.: 1

Name of the candidate: DEEPAK R

Title of the Dissertation: PROJECT ACTIVITY FOR ORPHANAGE MENAGEMENT

SYSTEM PROJECT REPORT

Year: APRIL 2019

SI. No.: 2

Name of the candidate: MIDHUNAMURALI C

Title of the Dissertation: FINGER PRINT (IMAGE) BASED ATM SECURITY

Year: APRIL 2019

SI. No.: 3

Name of the candidate: PRIYANGA P

Title of the Dissertation: ONLINE ASSIGNMENT SUBMISSION MANAGEMENT

Year: APRIL 2019

SI. No.: 4

Name of the candidate: T. KATHIRNATH

Title of the Dissertation: TEXTILE SHOP MANAGEMENT SYSTEM

Year: APRIL 2019

SI. No.: 5

Name of the candidate: T. SATHYA

Title of the Dissertation: HOSPITAL WORK PROCESSING SYSTEM

Year: APRIL 2019

SI. No.: 6

Name of the candidate: JEROME. J

Title of the Dissertation: GIF VIDEO CATEORZING BY USING MACHINE

**LEARNING** 

Year: APRIL 2019

SI. No.: 7

Name of the candidate : G.M.MALINI Title of the Dissertation : DOEMART

Year: APRIL 2019

## **Research Publication**

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

#### 2021

# 36. <u>Conceptual Review on Machine Learning Algorithms for Classification</u> Techniques

T.Mohana Priya, Dr. M. Punithavalli, International Journal of Scientific Research in Computer Science, Engineering and Information Technology (IJSRCSEIT), 7(1), 215-222 (2021), UGC CARE

#### 2020

# 35. <u>Groundwater Level Prediction Based On Rainfall And Ground Water</u> Utilization

K. Chinnathambi, M Punithavalli International Journal of Advanced Science and Technology, 29(3), 11566 – 11575 (2020)

34. <u>Multi Biometric Authentication using Score Level Fusion and Non-Invertible Template Formation Technique</u>

P Gayathirii, M Punithavalliss International Journal of Future Generation Communication and Networking, 13(3) (2020)

33. <u>Machine Learning Algorithm for Development of Enhanced Support</u> Vector Machine Technique to predict stress

Rajeshkanna R, T. Mohana Priya, Dr. M. Punithavalli, Dr. R. Rajesh Kanna Global Journal of computer Science and Technology, 20(2), 63-72 (2020)

# 32. <u>Semantic Similarity Analysis on Knowledge Based and Prediction Based</u> Models

Nisha Varghese, M. Punithavalli

International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, 9(6), 477-481 (2020)

# 31. <u>Tiny Videos-based Cascade Boosting (TCB) Classifier on Human Action</u> Recognition

R. Amsaveni, M. Punithavalli

International Journal of Advanced Science and Technology, 29(6), 427-433 (2020)

# 30. <u>Groundwater Level Prediction Based On Rainfall And Ground Water</u> Utilization

K. Chinnathambi, M. Punithavalli

International Journal of Advanced Science and Technology, 29(3), 11566 - 11575 (2020)

# 29. An effectual stochastic logitboost based discriminate filter for cloud traceability and analysis

K. Kavitha, M. Punithavalli

Solid State Technology, 0038-111X, vol.63. 6 (2020)

# 28. Efficient Network Threat Detection and Classification Method using SVM+NB Algorithm on Cloud Computing

K. Kavitha, M. Punithavalli

International Journal of Advanced Research in Engineering and Technology (IJARET), 11(11), 1852-1871 (2020)

# 27. <u>Bounded memory based frequent pattern growth approach with deep</u> neural network and decision tree for road accident prediction

N Arun Prasath, M Punithavalli

Indian Journal of Computer Science and Engineering (IJCSE), 11(5), 2020

# 26. Optimising prediction in overlapping and non-overlapping regions

B.V. Sumana, M Punithavalli

International Journal of Natural Computing Research (IJNCR), 9(1) (2020)

# 25. <u>Machine Learning Algorithm for Development of Enhanced Vector</u> <u>Machine Technique to predict Stress</u>

T. Mohana Priya, Dr. M. Punithavalli, Dr. R. Rajesh Kanna Global Journal of Computer Science and Technology 20(c) (2020)

2019

24. <u>An Efficient Data Mining Techniques - Multi Objective KNN Algorithm to</u> Predict Breast Cancer

T.Mohana Priya M.Punithavalli International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, 8(28) (2019)

23. Improved Support Vector Machine (I-SVM) Machine Learning Model to Predict Stress Data

T.Mohana Priya, Dr. M. Punithavalli, Journal of Management Research and Analysis (JMRA), 169-174, 1(1), 2019 ISSN No:2394-2762(UGC CARE)

- 22. <u>Impact on Brain due to Alcoholism using Improved Fuzzy C-Regression</u> based Alcohol Detection
- S. Gayathri and Dr. M .Punithavalli International Journal of Innovative Technology and Exploring Engineering 9(2) (2019)
- 21. <u>Alcohol Expectancy Prediction Using Fuzzy C-Regression Based Structural</u>
  <u>Brain Imaging</u>"
- S. Gayathri, M. Punithavalli, Chaitanya Journal of Intelligent Engineering & Systems, 12(5) (2019)
- 20. Impact in brain due to alcohol -note

S.Gayathri, Dr. M. Punithavalli International journal of scientific & technology research 8(11) (2019)

19. <u>Prediction of Road Accident Locations in Road Accident Database by</u>
Mining Spatio-Temporal Association Rules

Arun Prasath N and M. Punithavalli
ARPN Journal of Engineering and Applied Science 14(12) (2019)

- 18. <u>Card Fraud Reduction Technology in Biometric Fingerprint Security Using</u>
  Data Mining Algorithms
- P. Gayathiri, M. Punithavalli

International Journal of Engineering and Advanced Technology, 1321-1325, 8 (6), (2019)

# 17. <u>Partial Fingerprint Recognition of Feature Extraction and Improving</u> Accelerated KAZE Feature Matching Algorithm' authored

P. Gayathiri, M. Punithavalli International Journal of Innovative Technology and Exploring Engineering, 8(10), 3685-3690 (2019)

# 16. A Survey on Data Mining Algorithm for Brain Disorder

Gayathri S, Dr. M. Punithavalli International Journal Of Research In Advent Technology, 6(7), 1371-1375 (2018)

# 15. A Review On Road Accident Detection using Data Mining Techniques N. Arun Prasath and M. Punithavalli International Journal of Advanced Research in Computer Science, 9(2) (2018)

# 14. Improved Resource Allocation Algorithms for Cloud

J. Divyabharathi, Dr.M.Punithavalli International Journal of Computer Science and Mobile Applications, 6(1), 58-66, (2018)

# 13. <u>Artificial Recharge of Groundwater Using Data Mining Techniques: A Conceptual Survey</u>

K. Chinnathambi, Dr. M. Punithavalli
IPASJ International Journal of Computer Science (IIJCS), 6(2) (2018)

# 12. <u>A Review: Machine Learning Algorithms for Analysis of Smartphone</u> Addiction

V Chaitanya , Dr. M. Punithavalli, S , Gayathri International Journal of Research in Advent Technology, 6(12) (2018)

# 11. A Survey on Energy Aware Resource Allocation in a Cloud

J. Divyabharathi, Dr.M. Punithavalli International Journal of Advanced Research in Computer and Communication

Engineering, 6(8), (2017)

# 10. <u>Geo IP Detection of Credit Card Fraud Using K-Nearest Neighbor</u> Algorithm

P. Gayathiri, M. Punithavalli International Journal of computer Science and Mobile Applications, 5(11) 22-28, (2017)

# 9. Speech Recognition System for Different Kannada Dialects

Hemakumar G, Punithavalli M, Thippeswamy K International Journal of Scientific Research in Computer Science, Engineering and Information Technology, 2(5), 80-88, (2017)

# 8. <u>Large Vocabulary in Continuous Speech Recognition Using HMM and</u> Normal Fit

G Hemakumar, M Punithavalli Thippeswamy International Journal of Computer Trends and technology (IJCTT), 42 (2016)

7. Forward Weighted Firefly for Feature Selection in health Care Dataset Vydehi. S. Punithavalli.M Imperial Journal of inter Disciplinary Research, 2(5), 2016

# 6. Feature Selection Using Forward Weighted Genetic Algorithm

Vydehi. S. Punithavalli.M International Journal of Innovations in Engineering and Technology, 7(3), 267-270 (2016)

5. <u>Clustering Uncertain Gene Dataset using KLSE (Kullback-Leibler & Shannon Entropy to improve Cluster quality</u>

Vydehi.S, Punithavalli.M International Journal of applied Engineering Research, 4(11), (2015)

4. Similarity based clustering Techniques in uncertain dataset – A literature survey

Vydehi.S, Punithavalli.M International Journal of Advanced Engineering Research & Technology, 3(8) (2015)

3. Adaptive Particle Swarm Optimization based QoS Aware Scheduling Routing Protocol (APSO-QSRP) for Heterogeneous Mobile Ad hoc Networks M.Mohanraj and Dr.M.Punithavalli

International Journal of Applied Engineering Research, 115(5), 18-24 (2015) https://www.researchgate.net/publication/282271608

2. <u>Neural Network- based ideation learning for intelligent agents: e-brainstorming with privacy preferences</u>

S.Manju Dr. M. Punithavalli International Journal on Computational Vision and Robotics, 5(3), 231-253 (2015)

1. <u>Strategic Media Access Control and QoS Aware Scheduling based Routing</u>
Protocol (SMAC-SBRP) for Heterogeneous Mobile Ad Hoc Networks

M.Mohanraj , M.Punithavalli

International Journal of Computer Applications (0975 - 8887) 115(5) (2015)

#### 2021

SI.No. Title Author Name: Journal Name:

2020

Accordion content 2.

**Patents** 

Books Edited in Year Wise

Chapters Edited in Year Wise

Alumini Reflections: