

**Judy. M.V**

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Contact Mobile No: 919048991368

**Educational Qualifications:**

Ph.D., Computer Science

M.Phil., Computer Science

MCA

**Teaching and Research Experience: 14 years**

**Areas of Specialization:**

**Soft Computing Techniques:** Evolutionary Algorithms, Neural Networks

Fuzzy Logic

**Databases-** Oracle, MySQL, MS Access

**Web Technologies** –HTML, DHTML, XML, XHTML, CSS, JavaScript, PHP

Ruby on Rails, AJAX

**Semantic Web technologies** – OWL, JENA, RDF

**Programming Languages:** C, C++, Java, Visual Basic

**Research utilities:**

**Data Mining:** Matlab, Weka, R

**Computational Biology:** Chimera, BioPerl, Tinker

**Distributed Framework:** Apache Hadoop, MapReduce

**E-learning:** Personalized E-Learning systems with soft semantic web

Technologies Development of E-Learning Materials

### **Papers Published in International Journals:**

- Ashok, S., & Judy, M. V. (2015). A novel iterative partitioning approach for building prime clusters. *International Journal of Advanced Intelligence Paradigms*, 7(3-4), 313-325.
- Nanditha, J., Sruthi, K. N., Ashok, S., & Judy, M. V. (2016). Optimized Defect Prediction Model Using Statistical Process Control and Correlation-Based Feature Selection Method. In *Intelligent Systems Technologies and Applications* (pp. 355-366). Springer International Publishing.
- Sonumol, N. S., Uma, V. R., Ashok, S., & Judy, M. V. (2015). Community Detection in Multidimensional Genomic Dataset. *International Journal of Artificial Intelligence™*, 13(2), 109-117.
- Kumar, S. S., Krishnan, T., Ashok, S., & Judy, M. V. (2015). Clutter Reduction in Parallel Coordinates using Binning Approach for Improved Visualization. *International Journal of Electrical and Computer Engineering*, 5(6).
- Asok, A., Jisha, T. J., Ashok, S., & Judy, M. V. (2016). Integrated Framework Using Frequent Pattern for Clustering Numeric and Nominal Data Sets. In *Proceedings of International Conference on ICT for Sustainable Development* (pp. 523-530). Springer Singapore.
- Suma, V. R., Renjith, S., Ashok, S., & Judy, M. V. (2016). Analytical Study of Selected Classification Algorithms for Clinical Dataset. *Indian Journal of Science and Technology*, 9(11).
- Ashok, S., & Judy, M. V. (2016). Process Flow for Information Visualization in Biological Data. In *Proceedings of the International Congress on Information and Communication Technology* (pp. 541-549). Springer Singapore.
- Alana Mathew, Reshmi Raj, Sreeja Ashok , M.V.Judy ,”Exploring highly connected protein complexes in PPI networks “,International Journal of Control Theory and Applications , Volume 9, Issue 10, 2016, Pages 4269-4276

- Leena Aswathy Menon, R., SuryaPrabha, B., Sreeja Ashok, Judy, M.V.,” Application of ant colony optimization in identifying the key gene interactions”, International Journal of Control Theory and Applications , Volume 9, Issue 10, 2016, Pages 4211-4219
- Niranjan.R, Amal Prakash.N1,Sreeja Ashok , M.V.Judy,” Exploring Key Gene Interactions Using Particle Swarm Optimization”, Int J Pharm Bio Sci 2016 July ; 7(3):(B) 734 - 741
- Sreeja Ashok , Dr.M V Judy and N.Thushara Vijayakumar "Information Visualization in Gene Expression Data" in Computer Society of India Communications (CSIC), November 2014 issue
- Sreeja Ashok, N.Thushara Vijayakumar and Dr.M V Judy "Biological Data Science: Workflow" in Computer Society of India Communications (CSIC), November 2015 issue
- Vijayakumar, N. T., & Judy, M. V. (2016). Autism spectrum disorders: Integration of the genome, transcriptome and the environment. *Journal of the Neurological Sciences*, May 15, 2016 Volume 364, Pages 167–176. Elsevier Publication. [SNIP: 0.936, SJR: 1.024, IF: 2.126]
- Sivasankar, S., Nair, S., & Judy, M. V. “Feature Reduction in Clinical Data Classification using Augmented Genetic Algorithm”, International Journal of Electrical and Computer Engineering, 5(6), 2015.
- Divya Chandra Babu, Lekshmi A Kumar and M.V Judy Nair "Wrapper Feature Selection Methods along with Support Vector Machine in Disease Classification" European Journal of Scientific Research Volume 132 No 4
- Aiswarya Uday, Pooja Krishna C.U, Hari Narayanan A.G, M.V Judy "Pathway Phenotype Association Using Improved Weighted Random Forest" European Journal of Scientific Research Volume 132 No 1.
- G. Hari Narayanan, U. Krishnakumar, , M. V. Judy“An Enhanced MapReduce Framework for Solving Protein Folding Problem using a Parallel Genetic Algorithm” published ICT and Critical Infrastructure: Proceedings of the 48th Annual Convention of Computer Society of India- Vol I Volume 248 of the series Advances in Intelligent Systems and Computing ISSN 2194-5357 pp 241-250 SJR (SCImago Journal Rank) (2014) : 0.149 IPP (Impact per Publication) (2014) : 0.103 SNIP (Source Normalized Impact per Paper) (2014) : 0.154

- AshutoshRajan and M V Judy “ An Enhanced Map Reduce Framework for Improving the Performance of Massively Scalable Private Clouds”. International Journal of Computer Applications (IJCA),*Proceedings on Amrita International Conference of Women in Computing - 2013AICWIC(3):24-26*, January 2013. Published by Foundation of Computer Science, New York, USA
- Judy, M.V., B.Ramadoss., “An Enhanced Solution to the Protein Folding Problem Using a Hybrid Genetic Algorithm With G-Bit improvement Strategy”, International Journal of Modeling and Optimization 2012, Vol.2(3): 356-359 ISSN: 2010-3697
- Judy, M.V., Ravichandran, K.S&K.Murugesan, “A multi-Objective Evolutionary algorithm for Protein Structure Prediction with Immune Operators”, International journal, Computer Methods in Biomechanics and Biomedical Engineering, (2009) 1476-8259, Volume 12, Issue 4, August 2009, Pages 407 – 413, ISSN: 1476-8259 (electronic) 1025-5842 (paper) , (Impact Factor: 1.573) © Thomson Scientific Journal Citation Reports 2008
- Judy M.V, Ravichandran K.S, &K.Murugesan, “Enhancement of Protein Folding Problem using a Genetic Algorithm with Introns” Published in International journal of Computational Intelligence in Bio-informatics, ISSN:0973-385X Volume 1 Number1(2008) pp.35-43

- **Papers published in Conference Proceedings:**

- Nair, D. P., Dayanand, K., & Judy, M. V. (2015, August). Survey on Tag SNP selection methods using soft computing techniques. In Proceedings of the Third International Symposium on Women in Computing and Informatics (pp. 722-728). ACM.
- M.R.Bivin, M.V.Judy and B.Ramadoss, “A Neutrosophic Cognitive Map Based Approach for the Prediction of Severity of Autism Spectrum Disorder " has been accepted for presentation in Third International conference on Bioinformatics (IFIP), September 2013, NIT, Bhopal.
- SumeshS,CTripathi&M.V.Judy, ”A Hybridized Approach for Network Intrusion Detection System”, National Conference on Applications of Data Mining in Management of Metabolic and Degenerative Disorders (2012) , Amrita School of Arts and Sciences, Mysore, India.

- Hari Narayanan A G &M.V.Judy,” Analysis of Soft Computing Techniques used in Mining Health Care Data”, National Conference on Applications of Data Mining in Management of Metabolic and Degenerative Disorders (2012) , Amrita School of Arts and Sciences, Mysore, India.
- Hari Narayanan A.G., Krishankumar U., Judy M.V., Constructing a personalized e-learning system for students with autism based on soft semantic web technologies, IEEE International Conference on Technology Enhanced Education, January 2012published in IEEE XplorePrint ISBN: 978-1-4577-0725-4
- M.V.Judy, &K.S.Ravichandran, &K.Murugesan, “An Enhanced Multi-Objective Evolutionary Approach for Protein Structure Prediction “ IEEE International Advanced Computing Conference,(2009)Thapar University, Delhi, India.
- Judy, M.V., &Ravichandran, K.S. A solution to protein folding problem using a genetic algorithm with modified keep best reproduction strategyIEEE Congress on Evolutionary Computation,(2007),.Library of Congress: 2007928155, IEEE Xplore, ISBN: 1-4244-1340-0, Volume , Issue , Page(s):4776 – 4780
- Judy M.V, K.S.Ravichandran&K.Murugesan, “A Solution to the Protein Folding Problem using an Improved GA”BEST PAPER AWARD in CIT-BIOTECH (2007), An international conference organized by CIT, Coimbatore and TNAU
- Judy M.V, &K.S.Ravichandran, “Investigation of Large Scale Prediction ofDisulphide Bridges Using Soft Computing Techniques”, NCCTS07, National Conference organized by Sri Ramakrishna Engineering College, (2007) Coimbatore, India.
- Judy M V, “Making Industry Friendly Curriculum”, at the National Level Seminar held on May 2006, at SLCS college, Madurai.
- Nair Puja Prabhakar, Devika Rani,Hari Narayanan A.G,Dr. M.V Judy “ analyzing the impact of software design patterns in data mining application” Accepted in Springer-Advances in Intelligence and soft computing joint international conference on artificial intelligence and evolutionary computation in engineering systems (ICAIECES 2016) and power circuit and information technologies (ICPCIT 2016)

- Sreeja Ashok and Dr. M.V.Judy "Graph-Based Clustering Approach For Identifying Functionally Coupled Genes " is accepted and presented in the 2<sup>nd</sup> International Conference on Structural and Functional Genomics (ICSAFG-2016) at School of Chemical and Biotechnology, SASTRA University, Thanjavur , August 19-20, 2016. The paper has been considered for publication in any one of the SCI indexed journal "Journal of Bioinformatics and Computational Biology" or "Journal of Brazilian Archives of Biology and Technology" based on the scope of work.
  
- Thushara Vijayakumar and Dr. M.V.Judy " Computational Pathway Analysis for Complex Disorders" is accepted and presented in the 2<sup>nd</sup> International Conference on Structural and Functional Genomics (ICSAFG-2016) at School of Chemical and Biotechnology, SASTRA University, Thanjavur , August 19-20, 2016.

### **Funded Project**

<b>Role</b>	<b>Funding Agency</b>	<b>Duration</b>	<b>Amount (Rs)</b>
Principal Investigator	Department of Science and Technology	3 Years	28,55,084

### **Books/Chapters Published**

1. Security Monitoring National Conference Proceedings , ISBN13 978-81-924422-3-5
2. Celebrating Gynergy: Women in the Public Domain Proceedings, ISBN 13 978-81-924422-6-6
3. Literature and Technology: An Interface ISBN 13 978-81-924422-7-3
4. Proceedings of the International Congress on Information and Communication Technology ICICT 2015, Volume 1, Suresh Chandra, S., Bhatt, Y.C., Joshi, A., Mishra, D.K. (Eds.) ISBN 978-981-10-0767-5, © 2016, Available Formats:
5. Proceedings of International Conference on ICT for Sustainable Development , Proceedings of International Conference on ICT for Sustainable Development, ICT4SD 2015 Volume 1, ISBN 978-981-10-0129-1, © 2016

6. Intelligent Systems Technologies and Applications, Volume 1, Berretti, Stefano, Thampi, Sabu M., Srivastava, Praveen Ranjan (Eds.) ISBN 978-3-319-23036-8, © 2016
7. ICT and Critical Infrastructure: Proceedings of the 48th Annual Convention of Computer Society of India- Vol I , ICT and Critical Infrastructure: Proceedings of the 48th Annual Convention of Computer Society of India- Vol I, Satapathy, S.C., Avadhani, P.S., Udgata, S.K., Lakshminarayana, S. (Eds.) ISBN 978-3-319-03107-1, © 2014

### **Awards Received**

- **Best Paper Award** in CIT-BIOTECH (2007), An international conference organized by CIT, Coimbatore and Tamil Nadu Agricultural University
- **Longest Continuous SBC Award** from Computer Society of India(CSI), for year 2015 and 2016
- **Significant Contribution** under Computer Society of India Service, 2016