



Dr.RM.Vidhyavathi
Assistant Professor

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Academic Qualifications:

Degree	Year of Passing	University/Institute
M.Sc. (Computer Science)	May 2005	Madras University
M.Phil (Computer Science)	March 2007	Alagappa University
M.Tech (Information Technology)	April 2010	Sathyabama University
Ph.D (Computer Science)	February 2014	Alagappa University

Teaching Experience: 10.5 Years

Designation	Institution	Department	Duration
Assistant Professor	Alagappa University, Karaikudi.	Bioinformatics	Aug 2015 - till date
Teaching Assistant	Alagappa University, Karaikudi.	Computer Science and Engineering	July 2014 - April 2015

Teaching Assistant	Alagappa University,Karaikudi.	Computer Science and Engineering	July 2013 - April 2014
Senior Lecturer	Madha Institute of Engineering and Technology, Chennai.	Information Technology	June 2010 - Jan 2011
Senior Lecturer	Jaya Engineering College,Chennai.	Computer Science and Engineering	Aug 2006 - May 2010

Research Experience: 09.4 years

Academic and Additional Responsibilities

S.No.	Position - Dept. of Bioinformatics	Organization	Period	
			From	To
1	DDE- University Representative	Sivagangai		2023
2	DDE- University Representative	Mayilladudurai		2023
3	DDE- University Representative	Sivagangai		2022
4	DDE- University Representative	Sivagangai		2018
5	Member, BioInformatics and Drug Discovery Society	Alagappa University		
6	Co-ordinator,Placement cell	Alagappa University		2019-Till
7	Co- Coordinator, Industry Linkage (Sep-2015-till date)	Alagappa University		September 2015-Till
8	Co-ordinator,Swayam Course(2017-Till date)	Alagappa University		2017-Till
9	Co- Coordinator, VVP/NSS (July-2019)	Alagappa University		July 2019-Till
10	Secretary, School of Biological Sciences Alumni(2016-Till Date)	Alagappa University		2016-Till
11	Co-ordinator,NME(June2019-May2020)	Alagappa University		2019- 2020 2021-Till
12	Co-ordinator,Azaghu/Departmental Magazine(2016-Till Date)	Alagappa University		2016-Till
13	Training Officer,Vivekananda Cadet Corps(July2016-June2018)	Alagappa University		2016- 2018
14	Member,Centre for Yoga Education(2017-2021)	Alagappa University		2017-2018
15	Co-ordinator,Department Alumni and Parent Teacher Association	Alagappa University		2016- 2020
16	Co-ordinator,Department Website and Computer Maintenance Committee	Alagappa University		2015-Till
17	Member, Employability skills/career guidance (Dec-2016 to till date)	Alagappa University		2016-Till
18	Member, Purchase Committee	Alagappa University		2016-Till
19	Member, Research Committee	Alagappa University		2016-Till
20	Member, Curriculum Development	Alagappa University		2015-Till
21	Member, Examination Board	Alagappa University		2015-Till

Awards & Honors

Swayam Achievers Award presented by Digital Education Cell, Alagappa University, Karaikudi , 2019.

Areas of Research

Broad Subject : Programming Languages, Machine Learning, Bioinformatics

Area of Specialization : Deep Learning, Artificial Intelligence, Computational Biology

Current Research focus :

- Experimental and computational approaches on bioactive compound from *Ceratophyllum demersum* to against therapeutic targets.
- Design and development of database for prediction of quality of life in cancer patients Using medical devices.
- Pass Thought Mind Controlled Authentication with BCI Technology
- Identification of Potential Targets and Drug Candidates for Lung Cancer through Machine Learning and Experimental Approaches
- Intelligent Diabetic Retinopathy Detection with Deep Transfer Learning Models.

Patents Filed: 01

S.No	Patent Title	Name of Applicant(s)	Patent No.	Award Date	Agency/Country	Status
1	Smart pulse oximeter with data storage and wireless access	Dr. Prasad Selladurai, Dr. Purti Bilgaiyan, Dr. Ramasamy Vidhyavathi , Dr. Jesudass Joseph Sahayarayan, Sathiya Ayyadurai, Dr. Dharani Krishnaswamy Gopalakrishnan, Dr. Yuvaraj Kunnathur Periyasamy, Dr. Keyur Kumar Patel	Patent Design Number: 6318072	17 October 2023	Certificate of Registration for a UK Design. Adam Williams Comptroller-General of Patents, Designs and Trade Marks Intellectual Property Office	Designed and Published

Research Supervision / Guidance: Computer Science and Bioinformatics

Program of Study		Completed	Ongoing	
Research	Ph.D(ComputerScience), Ph.D(Bioinformatics)	-	Bioinfo 03	Computer Science 02
	M.Phil.	-	-	-
Project	M.Tech	-	-	-
	M.Sc	30	10	
	P.G.D.S.P	1		
	UG/Others	5	-	

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books/Chapters/ Monographs /Manuals
30	40	-	7	20

Cumulative Impact Factor (asper JCR)	63.64
h-index	11
i10	11
Total Citations	1050

Funded Research Projects

Completed Projects

S.No	Agency	Period		ProjectTitle	Budget (Rs.In lakhs)
1	AURF	2024	2025	Computational validation of antimicrobial activity on natural plant compounds	1,20,000
2	RUSA	2019	2020	MEDDB: Development of Specialized Antidengue Database Using Association Rule Mining Algorithm	4,80,000
3	RUSA	2022	2023	MEDDB: Development of Specialized Antidengue Database Using Association Rule Mining Algorithm	5,00,000
4	AURF Startup Grant	2015	2017	Classification of hierarchical clustering withFP-Growth algorithm to analyzing and creating the solution for chromosomal disorder	0.80

Consultancy Projects: Nil

Distinctive Achievements/Awards: Nil

Events organized in leading roles

Number of Seminars/Conferences/Workshops/Events organized	
	➤ Organizing Committee Member, Village Extension Programme on 27 th October to 19 th October, 2023.
	➤ Organizing Committee Member, 2 nd International Conference on “Recent Trends in Structural Bioinformatics and Computer Aided Drug Design” 2022.
	➤ Organizing Committee Member, 1 st International Conference on “Recent Trends in Structural Bioinformatics and Computer Aided Drug Design” 2019.
	➤ Organizing Committee Member, 11 th National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer Aided Drug Design” and 2 nd Annual Meeting of Bioinformatics and Drug Discovery Society [BIDDS] –2019.
	➤ Organizing Committee Member, 10 th National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer Aided Drug Design” and 1 st Annual Meeting of Bioinformatics and Drug Discovery Society [BIDDS] –2018.
	➤ Parents Teacher Association Meet organized by Coordinators on 4 th Mar 2017.
	➤ Organizing Committee Member, 8 th National Symposium Cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design (SBCADD-2017), 14 th -17 th Feb, 2017.
	➤ School of Biological Sciences Alumni Meet organized by Alumni Office Bearers on 4 th Jan 2017.

Events Participated (optional)

	➤ Organizing Committee Member, 8 th National Symposium Cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design (SBCADD-2016), 16 th -19 th Feb, 2016.
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Conferences/Seminars/Workshops:

1	Presented International Conference on Recent Trends in Computer Science-RTCS 2026 Department of Computer Science, Alagappa University, Karaikudi. 29 th and 30 th January 2026, Mangrove-Driven <i>Streptomyces albidoflavus</i> as a source of antibacterial metabolites against carbapenem-resistant <i>Klebsiella pneumoniae</i> .
2	Presented International Conference on Recent Trends in Computer Science-RTCS 2026 Department of Computer Science, Alagappa University, Karaikudi. 29 th and 30 th January 2026, Brainwave Authentication Using EEG Headset with BCI Technology.
3	Presented International Conference on Recent Trends in Computer Science-RTCS 2026 Department of Computer Science, Alagappa University, Karaikudi. DRNET-X A CNN-Based Classification and Hybrid Pre-Processing Based Deep Learning Framework for Diabetic

	Retinopathy image Identification.
4	Presented 3rd International Conference cum Workshop on “ Recent Trends in Structural Bioinformatics and Computer Aided Drug Design”(ICSBCADD’2025) Department of Bioinformatics, Alagappa University, Karaikudi.17th to 19th December 2025,In-silico study of 1-methyl-3-phenylindole from Terminalia bellirica as an estrogen receptor modulator for breast cancer treatment.
5	Presented 3rd International Conference cum Workshop on “ Recent Trends in Structural Bioinformatics and Computer Aided Drug Design”(ICSBCADD’2025) Department of Bioinformatics, Alagappa University, Karaikudi.17th to 19th December 2025, In-silico Approach of Antifungal Properties of Natural Plant Compounds Against Candida Albicans.
6	Presented 3rd International Conference cum Workshop on “ Recent Trends in Structural Bioinformatics and Computer Aided Drug Design”(ICSBCADD’2025) Department of Bioinformatics, Alagappa University, Karaikudi.17th to 19th December 2025, Uncovering Natural CARM1 Inhibitors for Breast Cancer from Hibiscus Species - A Multistep Computational Approach Integrating Docking, Pharmacophore Modeling and MD Simulations.
7	Presented 3rd International Conference cum Workshop on “ Recent Trends in Structural Bioinformatics and Computer Aided Drug Design”(ICSBCADD’2025) Department of Bioinformatics, Alagappa University, Karaikudi.17th to 19th December 2025, Computational Evaluation of Hemidesmus indicus Phytochemicals as Potent HSP90 Inhibitors in Ovarian Cancer Treatment
8	Session Chair Member in International Conference on Recent Trends in COMPUTER SCIENCE , held on 3 rd and 4 th April, 2025, Alagappa University, Department of Bioinformatics, Karaikudi.
9	Participated , “5 th International Conference on Recent Trends in Microbiology(RTM-2014)”, Organized by Department of Microbiology,Alagappa University,Karaikudi, February 26 th and 27 th 2024.
10	Presented , a paper presentation in International Conference on Recent trends in Artificial Intelligence, Block Chain Technologies and Internet Of Things (IOT) entitled as “Identifying Medical Diabetic Retinopathy Using Convolution Neural Network”, Department of CSE, EEE & ECE, Sri Raaja Raajan College of Engineering and Technology, Karaikudi, 10 th January 2024.
11	Presented , a Paper Presented entitled as “Eye Blink Authentication With Captcha To Unlock Using EEG Headset” in Two Days International Conference on “Innovative Trends In It (IC2IT23)”, Department of Computational Logistics, Alagappa University, Karaikudi. 9 th & 10 th November 2023.
12	Presented , a Paper Presented entitled as “Pass Thought Mind Controlled Authentication Will BCI Technology” in Internation Conference on Recent Trends in Computer Science, Department of Computer Science, Alagappa University, Karaikudi, 30 th & 31 st march 2023.
13	Presented , a poster presentation in International Conference on Recent Innovations in Biotechnology (ICRIB-2023) entitled as P.”Identification of potent Lead Molecules against Alanine racemase (alr) Protein involved in multi-dryg resistant <i>Klebsiella pnueumoniae</i> .” A.Identification of Patent Lead Molecules against Response Regulatory Protein VanRfrom Vancomycin resistant Enterococcus faecium K.Potent Inhibitors for Tetracycline Repressor Family of Transcription Regulator protein in Tetracycline – resistant strain of Acinetobacter baumannii , Centre for Nanoscience and Nanotechnology Sathyabama University, Chennai, 21 st to 23 rd Sept 2023.
14	Presented , a oral presentation “Structural Insight Into Cot H3 Protein Inhibition Targeting Mucormycosis Infection Through Computational Approach” 4th International Conference on Recent Trends in Microbiology (RTM-2023), Department of Microbiology, Alagappa University, Karaikudi, 5th and 6th January 2023.
15	Presented , “Antibacterial And Anti-Oxidant Activity Of Haloplegma Duperreyi Extracts”, 2nd International Conference cum Workshop on “Recent Trends in Structural Bioinformatics and Computer,Aided Drug Design, Department of Bioinformatics Alagappa University, Karaikudi, 21st to 25th November 2022.

16	Presented , a poster presentation in “Structural Insight Into Cot H3 Protein Inhibition Targeting Mucomycosis Infection Through Computational Approach”, National Level Conference on Biotechnology and OMICS Sciences BIO-OMICS-2022, Department of Biotechnology Alagappa University, Karaikudi, 27 th to 28 May 2022.
17	Participated , WEB-Conference on “Recent Trends of Computational Biology in Basic & Translational Research”. March 10 th -11 th 2022.
18	Participated , MHRD-RUSA 2.0 “Biomaterials”, Functional Synthetic Material for Biomedical Applications, Department of Computer Science, University of Madras, March 7 th – 11 th 2022.
19	Participated , International Conference on Advanced Computing (ICAC-2022), Department of Computer Science, Bharathiar University, Coimbatore-641046, March 3 rd & 4 th 2022
20	Participated , National Webinar on Machine Learning, UGC-HRDC Department of Computer Science, University of Madras, March 19 th 2022
21	Participated , Faculty Development Program organized by IEEE Madras Section on "Practical Exposure on Fundamental Mathematics behind Machine Learning", IEEE Madras Section and Department of Computer Science and Engineering SRM Institute of Science and Technology, from May 10-13, 2021.
22	Participated “Two Week Online Capacity Building Programme For Faculty Members and Research Scholars” organized by Alagappa University Under the sponsorship of UGC Stride Component-1 from 12 th June 2020-23 rd June 2020.
23	Participated , “A National Level 3 Day Virtual Faculty Development Program on “Moving To Master Science In Technology (MMST:2020)”, Organized by Freshmen Engineering Department from 18 th -20 th June 2020.
24	Participated “Machine Learning Techniques for Image Processing Approaches”, organized by Department of Computer Science, Mother Teresa Women’s University on 19 th & 20 th June 2020.
25	Participated , Savanth An IEEE International Webinar Series, “Finding Needles in a Hay stack: Liquid Biopsy for Nucleic Acid and Protein Molecular Biomarkers for Disease Diagnosis” organized by St. Joseph’s Institute of Technology, Department of Electronics and Communication Engineering, 19 th June 2020.
26	Participated , Savanth An IEEE International Webinar Series, “Developing Flexible and Spectrally Efficient Photonic Systems Using Frequency Combs” organized by St. Joseph’s Institute of Technology, Department of Electronics and Communication Engineering, 18 th June 2020.
27	Participated , Savanth An IEEE International Webinar Series, “Reproducibility and Benchmarking in AI and Robotics” organized by St. Joseph’s Institute of Technology, Department of Electronics and Communication Engineering, 17 th June 2020.
28	Participated , Savanth An IEEE International Webinar Series, “Big Data, IOT, Enterprise Data Management and the New data Requirements of Drones and Robotics Inspection Devices” organized by St. Joseph’s Institute of Technology, Department of Electronics and Communication Engineering, 16 th June 2020.
29	Presented a paper in the “11 th National Symposium cum Workshop on “Recent Trends in Structural Bioinformatics and Computer Aided Drug Design” entitled Jaundice: A Jaundice database Developed using data mining algorithm for therapeutically aid, Department of Bioinformatics, [SBCADD’2019], Alagappa University, Karaikudi, 12 th –15 th February 2019.
30	Presented a paper in the “Recent Trends in Drug Discovery, Development and Targeted Delivery System for Cancer”, entitled Identification of Potent Inhibitor from Medicinal Plants for ABL Kinase Involved in Cervical Cancer through <i>Insilico</i> Approach, Department of Biochemistry, J.J. College of Arts and Science, Pudukottai, 26 th -27 th September 2019.
31	Presented a paper in the “International Conference on Engineering, Medicine, Science & Technology, Kuala Lumpur”, entitled An efficient deep neural network based Classification model for dengue fever prediction, MAHSA University, Kuala Lumpur, Malaysia, 14 th - 15 th October 2019.

32	Participated “International Conference on Computational Intelligence and Applications (ICCIA-2019)”,Department of Computational Logistics,Alagappa University,Karaikudi, 8 th -9 th August 2019.
33	Presented a paper in the,”First International Conference on Computational Science(ICCS-2019)”,entitled Medicinal Plants Database for Dengue,Tuberculosis and Jaundice: A Common platform for Genomic,Chemical and Traditional information,Department of Computer Science,Alagappa University,Karaikudi,23 rd -24 th October 2019.
34	Participated , “Three-day International Workshop on E-Content Development for MOOCs among the FacultyMembers”,Digital Education Cell,Alagappa University,Karaikudi, 10 th to 13 th September 2019.
35	Participated , “Two-Day International Conference on Recent Trends in Bioplastics”,Department of Microbiology,Alagappa University,Karaikudi,9 th and 10 th December 2019.
36	Presented in the paper “International Conference on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design”, entitled <i>In Silico</i> Identification and Screening of Potent Bioactive Compound from <i>Acanthophora Spicifera</i> against Lung Cancer, Department of Bioinformatics, Alagappa University,Karaikudi,11 th to 13 th December 2019.
37	Presented a paper in the “10 th National Symposium cum Workshop on“Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" entitled Dendb:Development of Specialized Antidengue Database Using SVM and ARM Algorithms [SBCADD'2018].
38	Presented a paper in the “9 th National Symposium cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design"entitled SCN5A Gene SNP's in Irritable Bowel Syndrome and Its Influence in Structural Variance [SBCADD'2017].
39	Presented a paper in the “9 th National Symposium cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" entitled as Computational identification of potent inhibitors for Streptomycin 3'-adenylyl transferase of <i>Serratia marcescens</i> [SBCADD'2017].
40	Participated in theNational Workshop on“CareerProspects and Developments in Computer Science” Organized University Business Collaboration Centre & Development of Computer Science held on 27.02.2017 and 28.02.2017 at Alagappa University,Karaikudi
41	Participated in the International Workshop on “Molecular Physiology, Therapeutics and Experimental Medicine”conducted by Department of Animal Health and Management Held on 06.09.2016 and 07.09.2016 at Alagappa University,Karaikudi.
42	Presented a paper in the“National Seminar on Advances in Computer science”entitled Computational Algorithms and its Applications in Modern Biology,organized by the Department of Computer Science,Alagappa University,Karaikudi.
43	Participated , in the International Workshop on,“Data Science and Analytics”conducted By Department of Computer Science held on 27.09.2016 and 28.09.2016 at Alagappa University,Karaikudi.
44	Faculty Development Program on“Cloud Infrastructure and Services”at Alagappa University,Karaikudi held on 23.02.2015 to 27.02.2015.
45	Faculty Development Program on“Free and Open Source Software”at Jaya engineering college held on 23.11.2009 to 27.11.2009.
46	Anna University Sponsored FDP on“Object-Oriented Analysis and Design”held on 07.05.2007 to 21.05.2007.
47	Participated , in the I.T National Conference on, “WebTechnology and OpenSource”, Conducted by Jaya Engineering College held on 08.03.2007 and 09.03.2007 at CLRIC ampus,Chennai.

Extension Activities

Orientation program/Refresher Course,

1. **Refresher Course**, UGC-HRDC, Madras university, Madras, from **06.10.2025 to 18.10.2025**
2. **Refresher Course**, UGC-HRDC, Madurai Kamaraj university, Madurai, from **15.03.2023 to 30.03.2023**
3. **Refresher Course**, UGC-HRDC, Madras university, Madras, from **28.01.2021 to 10.02.2021**.
4. **Refresher Course**, UGC-HRDC, Bharathidasan University, Thiruchirappalli, from **16.07.2019 to 29.07.2019**.
5. **100th Orientation program**, UGC-HRDC, Bharathidasan University, Thiruchirappalli, from **15.11.2017 to 12.12.2017**.

Overseas Exposure / Visit

1. Malaysia-(October, 2019)

Membership in Professional / National / International bodies

1. Life member: BIDDs (Bioinformatics Drug Discovery Society), Tamil Nadu, Karaikudi.
2. Life Member in BOSE SCIENCE SOCIETY, pudukottai, Tamil Nadu.
3. Life Member in IAENG (Member Number: 194235) International Association of Engineers.

Recent Research Work:

1. Experimental and computational approaches on bioactive compound from cerotophyllum demersum to against therapeutic targets
2. Design and Development of Database for Prediction of Quality of Life in Cancer Patients Using Medical Devices.
3. Pass Thought Mind Controlled Authentication with BCI Technology
4. Intelligent Diabetic Retinopathy Detection with Deep Transfer Learning Models

Paper Publications:

Sl.No	List of Publication	Impact Factor
1.	Nalina Viswanathan, & Vidhyavathi Ramasamy* , (2026). Curcumin as a natural therapeutic agent for osteoarthritis: Molecular mechanisms, preclinical evidence, clinical applications, and future perspectives. <i>Inflammopharmacology</i> . https://doi.org/10.1007/s10787-026-02390-4 .	6.3
2.	Nooriya Begam, S., & Vidhyavathi, R. M* . (2026). NeuroAuth-GNN: EEG-based eye-blink CAPTCHA authentication using attention-guided graph neural networks and adaptive Neuro-SVM, <i>International Journal of Computer Information Systems and Industrial Management Applications</i> , 18(20s), 103–126. https://doi.org/10.70917/ijcisim-2026-5158 .	1.3
3.	Josephine Sahaya Vergin J., Vidhyavathi R.M. , Joseph Sahayarayan J, GESE-Net: a multi-scale vision transformer and graph-based ensemble framework for accurate automated diabetic retinopathy detection, <i>Biomedical Signal Processing and Control</i> , Volume 123, Part B, 1 May 2026, 110590.	5.7

4.	S. Nooriyabegam, R.M. Vidhyavathi , B. Vignesh, A. Sumaiya, Neuroauthnet: A brainwave-based authentication framework using BCI and deep learning for privacy-preserving identity verification, <i>Computers and Electrical Engineering</i> , Volume 135, May 2026, 111133.	5.5
5.	Latha VGomathi Goms VelusamyGomathi Goms VelusamyHari Ram Srinivasa RagavanHari Ram Srinivasa Ragavan, Vidhyavathi Ramasamy , Generating an efficient BACE1 inhibitor for the treatment of Alzheimer's disease based on AI-powered ADMET analysis, Molecular docking and Molecular dynamics studies, <i>Indian Journal of Biochemistry and Biophysics</i> , February DOI: 10.56042/ijbb.v63i3.18521	1.2
6.	J. Josephine Sahaya Vergin & R. M. Vidhyavathi , DRNET-X: a deep learning-based framework for diabetic retinopathy image detection using hybrid preprocessing and CNN-based classification, <i>Network Modeling Analysis in Health Informatics and Bioinformatics</i> . 2025 14:177 https://doi.org/10.1007/s13721-025-00665-4	2.4
7.	Dhamodharan Prabhu; Muthusamy Sureshan; Viswanathan Nalina; Sundararaj Rajamanikandan; Alwar Ramanujam Padmavathi; Ramasamy Vidhyavathi , Computational Identification of Inhibitors Targeting Hercynylcysteine Sulfoxide Lyase of Mycobacterium tuberculosis : Structure-Guided Virtual Screening and Molecular Dynamics Simulation Studies, <i>Journal of Computational Biophysics and Chemistry</i> . August 2025, DOI: 10.1142/S2737416525501121	2.1
8.	Sugumaran Muthuraj, Nalina Viswanathan, Kavitha Thangavel, Prabhu Dhamodharan, Vidhyavathi Ramasamy1* , Structural insight into Cot H3 protein inhibition targeting mucormycosis infection through computational approaches, <i>Indian Journal of Microbiology Research</i> 2025;12(2):266–276, https://doi.org/10.18231/j.ijmr.2025.039	1.5
9	Soundar Rajan Kulandhaivel, Pandiyan Muthuramalingam, Balasubramanian Sivaprakasam, Manikandan Ramesh, Arun Muthukrishnan, Kapildev Gnanajothi, Vidhyavathi Ramasamy , Thamaraiselvi Chandran, Hyunsuk Shin,* and Jesudass Joseph Sahayarayan*, In Silico Evaluation of Bioactive Compounds from Cucumis anguria L.as Potential Inhibitors of Antibiotic-Resistant New Delhi Metallo-β- Lactamase (NDM-1), <i>ACS Omega</i> 2025, 10, 23684–23695. https://doi.org/10.1021/acsomega.5c02627	4
10	Hari Ram S, Latha V, Gomathi V, Ranichitra A, Varsha Dhamotharan, Vidhyavathi RM ,Prabhu D, AI-driven drug design for short-term anxiety disorder, <i>Research Square</i> , DOI: 10.21203/rs.3.rs-4486318/v1	1.6
11	J. Josephine Sahaya Vergin, Dr. RM. Vidhyavathi* , “Google ARDA Tool Using Artificial Intelligence in Self Optimizing Algorithm To Prevent Diabetic Retinopathy And Diabetic Macular Edoema (DME)”, <i>Journal Of Machine Intelligence Research</i> , Vol 17, 12, B, 9540- E 9550, 2023.	10
12	Pandimuthu Chinnaiyah,N. Angaiyarkanni ,Nooriya Begam Shahul Hameed & Vidhyavathi Ramasamy* , “An Enhanced Intrusion Detection System (IDS) Framework Using Grey Wolf Optimization (GWO) and Ensemble Machine Learning (EML) Mechanisms”, <i>Journal of Data-driven and Industrial Computing</i> , Vol , I B 285-E 292, 2023.	-
13	JesudassJosephSahayarayan, KulanthaivelSoundarRajan, RamasamyVidhyavathi , MutharasappanNachiappan, DhamodharanPrabhu, Saleh Alfarraj, SelvarajArokiyaraj, Malorpavanaen NicholasDaniel, ”In-silico protein-ligand docking studies against the estrogen protein of breast cancer using pharmacophore based virtual screening approaches”, <i>Saudi Journal of Biological Sciences</i> , 2021,Volume 28, Issue 1, Pages 400-40. https://doi.org/10.1016/j.sjbs.2020.10.023	4.22
14	Sundararaj Rajamanikandan, Soundarapandian Soundarya, AnandhiParamasivam, DhamodharanPrabhu, JeyaramanJeyakanthan& VidhyavathiRamasamy “Computational identification of potential lead molecules targeting rho receptor of Neisseria gonorrhoeae”, <i>Journal of Biomolecular Structure & Dynamics</i> , 2021 Vol , I , B –E,3.310.	3.310

15	Soundarya S, Vidhyavathi RM* , Joseph Sahayarayan,, Langeswaran K,Biruntha M,” In silico mechanistic intervention of medicinal plants derived inhibitors against ABL kinase targeting cervical cancer: A novel approach”, <i>Biomedical Research</i> ,2021 32 (1): 19-23.	-
16	ThangarasuSuganya Devi, Karuppiah Vijay, R. M. Vidhyavathi , Ponnuchamy Kumar, MuthusamyGovarthanan&ThangavelKavitha, ”Antifungal activity and molecular docking of phenol, 2,4-bis(1,1-dimethylethyl) produced by plant growth-promoting actinobacteriumKutzneria sp. strain TSII from mangrove sediments”, <i>Archives of Microbiology</i> ,2021,0302-8933.	2.55
17	MuthumanickamSankar, Balajee Ramachandran, BoomiPandi, NachiappanMutharasappan, VidhyavathiRamasamy , PooraniGurumallesPrabu, GowrishankarShanmugaraj, Yao Wang, BrinthaMuniyandai, SubaskumarRathinasamy, BalakumarChandrasekaran, Mohammad F. Bayan, JeyakanthanJeyaraman, GurumallesPrabuHalliah and Solomon King Ebenezer,”Insilico Screening of Natural Phytocompounds towards Identification of Potential Lead Compounds to Treat COVID-19”, <i>Frontiers in Molecular Biosciences</i> , 2021, Vol 8,I , B –E.5.249.	6.11
18	Vijay K, KirupaSree K, Suganya Devi T, Soundarya S, Vidhyavathi RM , Kavitha T,” Computational biology approaches revealing novel target in vascular wilt pathogen <i>Fusariumoxysporum</i> f. sp. <i>Lycopersici</i> for the ligands of marine actinobacterialorigin”, <i>Journal Pure Applied Microbiology</i> , Vol 14,ISSN 2581-690X,2020.	-
19	E.Laxmi Lydia, RM.Vidhyavathi , Irina Pustokhina and Denis AlexandrovichPustokhin,”Comparative Performance Analysis of Apache Spark and Map reduce using K-Means”, <i>Journal on Emerging Technologies</i> ,Vol 11(2):198-204,ISSN No:0975-8364,2020.	-
20	K.Shankar,Eswaran Perumal, RM.Vidhyavathi ,”Deep Neural Network with moth Search optimization algorithm based detection and classification of diabetic Retinopathy images”, <i>Journal of SN Applied Sciences</i> , 2:748,2020.	-
21	Dr.C.Balakrishnan, Dr.RM.Vidhyavathi ,Dr.K.Kavitha,Dr.J.JosephSaharayan,Dr.S.Santhosh Kumar,”Mathematical Model-Based Speech Signals Processing Effects on Human Strees ”, <i>Journal of Emerging Trends in Engineering Research</i> ,Feb,2020.	-
22	Johnson J, Lakshmanan G, Biruntha M, Vidhyavathi RM , Kalimuthu K, Sekar D,” Computational identification of MiRNA – 7110 from pulmonary arterial hypertension (PAH) ESTs: a new microRNA that links diabetes and PAH”, <i>Hypertension Research</i> , ISSN 0916-9636, 2019.	5.53
23	Mani panagal,BirunthaM, VidhyavathiRM ,Sivagurunathan P , Senthilkumar S. Dissecting the role f miR-21in different types of stroke”, <i>Gene</i> . 2019, 69; 72(1):681.	3.91
24	E. Laxmi Lydia P. Krishna Kumar K. Shankar S. K. Lakshmanaprabu R.M. Vidhyavathi Andino Maselena.Charismatic Document Clustering Through Novel K-Means Non-negative Matrix Factorization (KNMF) Algorithm Using Key Phrase Extraction”, <i>Parallel Programming</i> , 2018; 23 (4):1-19.	1.45
25	Shankar K ,Mohamed Elhoseny, Lakshmanaprabu S K , Ilayaraja M , Vidhyavathi RM , Mohamed A., Elsoud ,Majid Alkhambashi. “Optimal feature level fusion based ANFIS classifier for brain MRI image classification”, <i>Concurrency and Computation</i> , 2018: e-4887:1-12.	1.83

Book Publications:
Nalina Viswanathan, Josephine Sahaya Vergin J, Rajamanikandan Sundararaj and Vidhyavathi Ramasamy , Future trends and research directions in AI-driven animal husbandry. <i>NIPA® GENX Electronic Resources & Solutions Pvt. Ltd.</i> ISBN: 978-93-72195-59-0.
Dr. RM. Vidhyavathi and Dr. Chellamuthu , AI-Driven Data Analytics for Student Performance Tracking , <i>Vasugi Meera Printers Publishers</i> ,978-81-988595-4-9.
Nalina Viswanathan, Josephine Sahaya Vergin J, Rajamanikandan Sundararaj and Vidhyavathi Ramasamy , Understanding Neuroblastoma: Epidemiology, Risk Factors, and Clinical Presentation , <i>Cambridge Scholars Publishing</i> , ISBN: 978-1-0364-7424-9.
Josephine Sahaya Vergin J, Nalina Viswanathan, Rajamanikandan Sundararaj and Vidhyavathi Ramasamy , Immunotherapy and Targeted Therapies in Neuroblastoma , <i>Cambridge Scholars Publishing</i> , ISBN: 978-1-0364-7424-9.
Mohamed Ansari Raja, Parvin Banu, Nooriya Begam, Ramasamy Vidhyavathi , and B. Sundaravadivazhagan, Role of Data Analytics in Precision Agriculture and Crop Monitoring , <i>Apple Academic Press</i> , ISBN: 9781779643988.
Formulating Policy Guidelines and Educational Frameworks for the Future of AI Parenting , Nalina Viswanathan, Josephine Sahaya Vergin J, Rajamanikandan Sundararaj and Vidhyavathi Ramasamy , <i>NIPA® GENX Electronic Resources & Solutions Pvt. Ltd.</i> , ISBN: 9789372198829.
Josephine Sahaya Vergin J, Nalina Viswanathan, Rajamanikandan Sundararaj and Vidhyavathi Ramasamy , Envisioning the Future of Parenting in an AI-Integrated Synthetic and Cognitive Age, <i>NIPA® GENX Electronic Resources & Solutions Pvt. Ltd.</i> , ISBN: 9789372198829.
Viswanathan Nalina, Dhamodharan Prabhu, Jesudass Joseph Sahayarayan, and Ramasamy Vidhyavathi , Advancements in AI for Computational Biology and Bioinformatics: A Comprehensive Review, Artificial Intelligence (AI) in Cell and Genetic Engineering, Methods in Molecular Biology, ,Springer Nature, 2025:2952:87-105. doi: 10.1007/978-1-0716-4690-8_6.
J. Josephine Sahaya Vergin and Dr. RM. Vidhyavathi “Enhancing Innovations and Leading Future World in IoT”, Handbook on Applications of IOT in Science and Technology”, First Edition, September 2023, ISBN Number: 978-93-93622-78-5.
Pandimuthu Chinnaiah,N. Angaiyarkanni, Nooriya Begam, Vidhyavathi Ramasamy , “An Enhanced Intrusion Detection System (IDS) Framework Using Grey Wolf Optimization (GWO) and Ensemble Machine Learning (EML) Mechanisms”, July 2023 , In book: Proceedings of International Conference on Advanced Communications and Machine Intelligence, pp 285–292,(DOI: 10.1007/978-981-99-2768-5_26)
Jenifer Mahilraj , Josephine Sahaya Vergin , Vidhyavathi Ramasamy , Nooriya Begam , Joseph Sahayarayan “Advanced Method of MOB-I App Used for Medical and Agriculture”, June 2023, In book: Perspectives on Social Welfare Applications’ Optimization and Enhanced Computer Applications, Pages: 15, ISBN13: 9781668483060,(DOI: 10.4018/978-1-6684-8306-0.ch004)
Vidhyavathi Ramasamy , Sameswari Vadivel, Sudha Kothandapani, Jenifer Mahilraj, P. Sivaram, Bhisham SharmaAn Optimal Feature Selection with Neural Network-Based Classification Model for Dengue Fever Prediction”,March (2023), UTC from IEEE Xplore, 979-8-3503-4696-1, (DOI: 10.1109/ISCON57294.2023.10112011)

Vidhyavathi Ramasamy, Nooriya Begam, Josephine Sahaya Vergin, “ C Programming Language”, vlaplanche_lap, LAMPERT Academic Publishing, ISBN: 978-620-5-63122-5.

Reviewer:

S.no	Journal Name	Date of Reviewed	Article Name
1.	Health Informatics Journal	10-09-2026	Transformer-Based Retinal Feature Learning Network for Biomedical Image Analysis and Early Diabetic Retinopathy Detection Using Retinal Fundus Images
2.	Intelligence-Based Medicine	04-09-2026	Quantum Computing and Agentic Artificial Intelligence in Bioinformatics: Strategic Opportunities and Governance Imperatives for South Africa and Africa Maano Malima; Mxolisi Nene
1	Journal of Genetic Engineering and Biotechnology	21-08-2026 10-09-2026	Coumarins as Modulators of Protein–Protein Interactions: Computational Insights into Biological Pathways with Clinical Relevance Journal of Genetic Engineering and Biotechnology
2	Computational Biology and Chemistry	21-08-2026	Computational Prioritization of Breast Cancer Biomarker Candidates Through Automated Protein–Protein Interaction Network Analysis: A Multi-Database Framework
3	ACS Omega	28-07-2026 10-09-2026	Enzyme-Based Biochip Sensor for Impedimetric Detection of Antibiotic Residues in Water
4	Journal of Biomolecular Structure and Dynamics	14-02-2023	Dysregulated Expression of MOB3 family Alters Patients Survival in Colon Cancer
5	Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization	11-10-2022	Blood Vessel Segmentation Using Deep Learning Architectures For Aid Diagnosis Of Diabetic Retinopathy
6	Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization	11-10-2022	MRI Modality-based Brain Tumor Segmentation Using Deep Neural Networks
7	Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization	23-09-2022	Efficient Detection of Knee OA Severity from Radiographic Imaging Using Deep Learning

8	Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization	12-08-2022	An intelligent approach for detection and grading of diabetic retinopathy and diabetic macular edema using retinal images
9	In International Conference on Recent Trends in Information Technology and its Application ICRTITA'22.	29th & 30th August 2022	Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, No.42, Avadi-Vel Tech Road, Poonamallee - Avadi High Rd, Chennai, Tamil Nadu 600062

Resource persons in various capacities: Nil