Dr. RM. Vidhyavathi

Assistant Professor

Contact

Address	:	Department of Bioinformatics Alagappa University Karaikudi – 630 003 Tamil Nadu, INDIA
Employee Number	:	34303
Contact Phone (Office)	:	+91 - 4565 223343
Contact Phone (Mobile)	:	+91 – 9444835869
Contact e-mail(s)	:	vidhyamiss@gmail.com; vidhyavathirm@alagappauniversity.ac.in

Academic Qualifications

Degree	Institution	Year	Branch	Class
Ph. D.	Alagappa University, Karaikudi, TN	**2014**	Computer Science	First
M.Tech	Satyabhama University, Sollinganallur ,Chennai	**2010**	Information Technology	First with Distinction
M.Phil	Alagappa University, Karaikudi, TN	**2007**	Computer Science	Second
M. Sc.	S.R.M.Arts and Science College, Kattankulathur, Chennai	**2005**	Computer Science	First
B. Sc.	Sri Saradha Niketan Womens College, Amaravathipudhur, Karaikudi	**2002**	Computer Science	First

Teaching Experience

Total Teaching Experience: 11 Years & 9 Months

Position	Institution	Duration
Assistant Professor	Dept. of Bioinformatics Alagappa University Karaikudi, Tamil Nadu	8 years 09 months (Continue)
Teaching Assistant	Dept.of. Computer Science Alagappa University Karaikudi, Tamil Nadu	**July** 2013 to **April** 2015
Senior Lecture	Dept. of Computer Science and Engg. Madha Institute of Engineering and Technology, Chennai, Tamil Nadu	9 Months
Senior Lecture	Dept. of Computer Science and Engg. Jaya Engineering College, Thiruninravur, Chennai, Tamil Nadu	3 years
Lecturer	CoE in Bioinformatics, School of Biotechnology, Madurai Kamaraj University	4 years

Research Experience

Total Research Experience   :   08 Years 09 Months

Position	Institution / University	Duration
Assistant Professor	Dept. of Bioinformatics Alagappa University Karaikudi, Tamil Nadu	8 years 11 months (Continue)

Academic and Additional Responsibilities

S.No	Position	University Bodies	Period	
			From	To
1.	Department Level Member	Bioinformatics and Drug Discovery Society		
2.	Department Level Coordinator	Placement cell	2019	Till Date
3.	Department Level Coordinator	Industry Linkage	Sep 2015	Till Date
4.	Department Level Coordinator	Swayam Course	2017	Till Date
5.	Department Level Coordinator	Village Extension Programme	2024	Till Date
6.	Secretary	School of Biological Sciences Alumni	2016	Till Date
	Department Level Coordinator	Non Major Elective	June 2019	May 2020
7.	Department Level Coordinator	Azaghu / Departmental Magazine	2016	2020
8.	Training Officer	Vivekananda Cadet Corps	July 2016	June 2018
9.	Member	Centre for Yoga Education	2017	2021
10.	Department Level Coordinator	Department Alumni and Parent Teacher Association	2017	2020
11.	Department Level Coordinator	Department Website and Computer Maintenance Committee	2015	2024
12.	Department Level Member	Employability skills/career guidance	Dec 2016	Till date
13.	Department Level Member	Purchase Committee	Dec 2016	Till date
14.	Department Level Member	Research Committee	Dec-2016	Till date
14.	Department Level Member	Curriculum Development	Dec-2016	Till date

15.	Department Level Member	Examination Board	Dec-2016	Till date

Areas of Research

Research Expertise: Data mining and Data Warehousing, Bioinformatics, Database Management System, Cyber Security, Cloud Computing, Big Data Analysis and Computational Biology, Machine Learning and Artificial Intelligent,Block Chain Technology

- Experimental and computational approaches on bioactive compound from *cerotophyllum 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
- Intelligent Diabetic Retinopathy Detection with Deep Transfer Learning Models.

Patents Filed:01

- **Smart pulse oximeter with data storage and wireless access.**

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	Ph.D		04
	P.G.D.S.B	01	-
	M.Phil	-	-
Project	PG	12	04
	UG/ Others	05	-

Publications

International	National	Others

Journals	Conferences	Journals	Conferences	Books/Chapters/Monographs/Manuals
14	**02**	**01**	**09**	**Book:01** **Book Chapters:03**

Cumulative Impact Factor(as per JCR)   :23.64

h-index   :10

i10 index   :10

Total Citations   :897

Funded Research Projects

Ongoing Projects:

S.No	Agency	Period		ProjectTitle	Budget (Rs.In lakhs)
		From	**To**		
1.	RUSA	2019 to 2020		**MEDDB:** Development of Specialized Anti-dengue Database Using Association Rule Mining Algorithm	**04.80**
2.	RUSA	2022 to 2023		**MEDDB:** Development of Specialized Anti-dengue Database Using Association Rule Mining Algorithm	**05.00**

Completed Projects:

S.No	Agency	Period		Project Title	Budget (Rs.In lakhs)
		From	**To**		
1.	AURF Startup Grant	**2016 To 2018**		Classification of hierarchical clustering with FP-Growth algorithm to analyzing and creating the solution for chromosomal disorder	**0.80**

Number of Seminars /Conferences /Workshops/ Events organized:

Events organized in leading roles

Position	Programme	Duration	Institution
Organizing Committee Member	2nd International Conference cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" (ICSBCADD'2022)	21st -25th November, 2022	Department of Bioinformatics, Alagappa University, Karaikudi, Tamil Nadu, India
Organizing Committee Member	International Conference on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" (ICSBCADD – 2019)	11th-13th December, 2019	Department of Bioinformatics, Alagappa University, Karaikudi, Tamil Nadu, India
Organizing Committee Member	11th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design", 2019	12th-15th February, 2019	Department of Bioinformatics, Alagappa University, Karaikudi, Tamil Nadu, India.
Organizing Committee Member	10th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" and 1st Annual Meeting of Bioinformatics and Drug Discovery Society[BIDDS]–2018.	2018	Department of Bioinformatics, Alagappa University, Karaikudi, Tamil Nadu, India.
Coordinator	Parents Teacher Association Meet	4th Mar 2017	Department of Bioinformatics, Alagappa University, Karaikudi, Tamil Nadu, India
Organizing Committee Member	8th National Symposium Cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design (SBCADD-2017),	14th -17th February,,2017	Department of Bioinformatics, Alagappa University, Karaikudi, Tamil Nadu, India
Alumni Office Bearers-Treasurer	School of Biological Sciences Alumni Meet organized by Alumni Office Bearers	4th January 2017	Department of Bioinformatics, Alagappa University, Karaikudi, Tamil Nadu, India
Organizing Committee	7th National Symposium	16th -19th February,2016.	Department of Bioinformatics, Alagappa

Member	Cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design (SBCADD-2016),		University, Karaikudi, Tamil Nadu, India

Events Participated

Number of Conferences/Seminars/Workshops:

S.No	Conferences	Seminars	Workshops
1.	07	05	13

Overseas Exposure/ Visits

- Malaysia (Masha University-2019)

Membership

1. Life member: BIDDS (Bioinformatics Drug Discovery Society), Tamil Nadu, Karaikudi.

Advisory Board

Year/Period	Name of the BoS/Administrative Committee / Academic Committee	Role
July 28th 2022	Broad Based Board of Studies (BBBOS - 2022)	Member
21st May 2019	Board of Studies Meeting -2019	Member

List of Research Articles / Recent Publications

S. No	Authors/Title of the paper/Journal	Impact Factor
1.	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)", Journal Of Machine Intelligence Research, Vol 17, 12, B, 9540- E 9550, 2023.	-

2.	Pandimuthu Chinnaiah, 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", Journal of Data-driven and Industrial Computing, Vol , I B 285-E 292, 2023.	-
3.	Jesudass Joseph Sahayarayan, Kulanthaivel Soundar Rajan, **Ramasamy Vidhyavathi**, Mutharasappan Nachiappan, Dhamodharan Prabhu, Saleh Alfarraj, Selvaraj Arokiyaraj, Malorpavanaen Nicholas Daniel, "In-silico protein-ligand docking studies against the estrogen protein of breast cancer using pharmacophore based virtual screening approaches", *Saudi Journal of Biological Sciences,* 2021,Volume 28, Issue 1, Pages 400-40. https://doi.org/10.1016/j.sjbs.2020.10.023	04.22
4.	Sundararaj Rajamanikandan, Soundara pandian Soundarya, Anandhi Paramasivam, Dhamodharan Prabhu, Jeyaraman Jeyakanthan & **Vidhyavathi Ramasamy** "Computational identification of potential lead molecules targeting rho receptor of Neisseria gonorrhoeae", *Journal of Biomolecular Structure & Dynamics ,* 2021 Vol , I , B –E,3.310.	3.310
5.	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", *Biomedical Research* ,2021 32 (1): 19-23.	-
6.	Thangarasu Suganya Devi, Karuppiah Vijay, **R. M. Vidhyavathi**, Ponnuchamy Kumar, Muthusamy Govarthanan & Thangavel Kavitha, "Antifungal activity and molecular docking of phenol, 2,4-bis(1,1-dimethylethyl) produced by plant growth-promoting action bacterium Kutzneria sp. strain TSII from mangrove sediments", *Archives of Microbiology*,2021,0302-8933)	02.55
7.	Muthumanickam Sankar, Balajee Ramachandran, Boomi Pandi, Nachiappan Mutharasappan, **Vidhyavathi Ramasamy**, Poorani Gurumallesh Prabu, Gowri Shankar Shanmugaraj, Yao Wang, Brintha Muniyandai, Subaskumar Rathinasamy, Balakumar Chandra sekaran, Mohammad F. Bayan, Jeyakanthan Jeyaraman, Gurumallesh Prabu Halliah and Solomon King Ebenezer,"Insilico Screening of Natural Phytocompounds towards Identification of Potential Lead Compounds to Treat COVID-19", *Frontiers in Molecular Biosciences*, 2021,Vol 8,I , B –E.5.249.	06.11

Resource persons in various capacities

National Conferences : -

International Conferences : -

Invited Lectures : 02

Book Publications:

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, Accepted, **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	Journal of Bimolecular Structure and Dynamics	14-02-2023	Dysregulated Expression of MOB3 family Alters Patients Survival in Colon Cancer
2	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

3	Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization	11-10-2022	MRI Modality-based Brain Tumor Segmentation Using Deep Neural Networks	
4	Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization	23-09-2022	Efficient Detection of Knee OA Severity from Radiographic Imaging Using Deep Learning	
5	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	
	https://www.webofscience.com/wos/op/peer-reviews/summary			
6.	In International Conference on Recent Trends in Information Technology and its Application ICRTITA'22 during **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		

Date   :   06.03.2024   (Signature)

Place   :   Karaikudi

Name:Dr.RM.Vidhyavathi

Designation: Assistant Professor