

Dr.RM.Vidhyavathi AssistantProfessor

## **Contact Details:**

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## **Academic Qualifications:**

Degree	Year of Passing	University/Institute
M.Sc. (ComputerScience)	May,2005	Madras University
M.Phil (ComputerScience)	Mar,2007	AlagappaUniversity
M.Tech (InformationTechnology)	Apr,2010	SathyabamaUniversity
Ph.D (ComputerScience)	Feb,2014	AlagappaUniversity

# **Teaching Experience: 10.5 Years**

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

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

Research Experience: 09.4years

### **Additional Responsibilities:**

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

### Research Area of The Field:

Datamining and DataWarehousing, Database Security, Bioinformatics, Networking, Database Management System, Network Security, Information Security, Cloud Computing, Big Data Analysis and Computational Biology, Machine Learning and Artificial Intelligent, Block Chain Technology.

## **Research Supervision / Guidance: Computer Science and Bioinformatics**

	Program of Study	Completed	Ongoing	
Research	Ph.D(ComputerScience), Ph.D(Bioinformatics)	-	Bioinfo 02	Computer Science
Research	M.Phil.	-	-	V-
	M.Tech	-	-	
Project	M.Sc	12	06	
_	P.G.D.S.P	1		
	UG/Others	5	-	

### **Publications**

International		Nat	Others	
Journals	Conferences	Journals	Conferences	Books/ Chapters / Monographs /Manuals
14	2	-	9	2

CumulativeImpactFactor(asperJCR)		23.64
h-index	:	10
i10	:	10
TotalCitations	:	671

### **Funded Research Projects**

## **Completed Projects:**

S. No	Agency	Peri	od	ProjectTitle	Budget (Rs. In
	Agency	From	To	Trojectrice	lakhs)
1	AURF Startup Grant	2015	2017	Classification of hierarchical clustering with FP-Growth algorithm to analyzing and creating the solution for chromosomal disorder	0.80

## **On-going Projects:**

S.No	Agency	Period			Budget (Rs.In lakhs)
1		From	То	ProjectTitle	First Installment
	RUSA	2019		MEDDB:Development of Specialized Antidengue Database Using Association Rule Mining Algorithm	4,80,000

ConsultancyProjects: Nil

Numl	ber (	of Seminars/Conferences/Workshops/Events organized
	>	Organizing Committee Member, International Conference on "Recent Trends in StructuralBioinformatics
		andComputerAidedDrugDesign"2019.
	~	Organizing Committee Member, 11 <sup>th</sup> National Symposium cum Workshop on "Recent Trendsin Structural
		Bioinformatics and Computer Aided Drug Design" and 2 <sup>nd</sup> Annual Meeting ofBioinformatics andDrug
		DiscoverySociety[BIDDS] –2019.

- > Organizing Committee Member, 10<sup>th</sup> National Symposium cum Workshop on "Recent Trendsin Structural Bioinformatics and Computer Aided Drug Design" and 1StAnnual Meeting of Bioinformatics and Drug DiscoverySociety[BIDDS]-2018.
- Parents Teacher Association Meet organized by Coordinators on 4<sup>th</sup> Mar 2017.
- > Organizing Committee Member, 8th National Symposium Cum Workshop on Recent Trendsin Structural Bioinformatics and Computer Aided Drug Design (SBCADD-2017), 14<sup>th</sup>-17<sup>th</sup>Feb,2017.
- School of Biological Sciences Alumni Meet organized by Alumni Office Bearers on 4<sup>th</sup>Jan2017.
- Organizing Committee Member, 8th National Symposium Cum Workshop on Recent Trendsin Structural Bioinformatics and Computer Aided Drug Design (SBCADD-2016), 16<sup>th</sup>-19<sup>th</sup>Feb,2016.

#### **Events Participated(optional)**

Conf	erences/Seminars/Workshops:
1.	Participated, WEB-Conference on "Recents Trends of Computational Biology in Basic & Translational Research". March 10 <sup>th</sup> -11 <sup>th</sup> 2022.
2.	Participated, MHRD-RUSA 2.0 "Biomaterials", Functional Synthetic Material for Biomedical Applications, Department of Computer Science, University of Madras, March 7 <sup>th</sup> – 11 <sup>th</sup> 2022.
3.	Participated, International Conference on Advanced Computing (ICAC-2022), Department of Science ,Bharathiar University,Coimbatore-641046, March 3 <sup>rd</sup> & 4 <sup>th</sup> 2022
4.	Participated, National Webinar on Machine Learning, UGC-HRDC Department of Computer Science, University of Madras, March 19 <sup>th</sup> 2022
5.	Participated, Faculty Development Program organized by IEEE Madras Sectionon "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.
6.	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 12th June 2020-23rd June 2020.
7.	Participated, "A National Level 3 Day Virtual Faculty Development Program on "Moving To Master Science InTechnology(MMST:2020)", Organized by Freshmen Engineering Department from 18 <sup>th</sup> -20 <sup>th</sup> June 2020.
8.	Participated"Machine Learning Techniques for Image Processing Approaches", organizedbyDepartmentofComputerScience,Mother Teresa Women's University on 19 <sup>th</sup> & 20 <sup>th</sup> June2020.
9.	Participated, Savanth An IEEE International Webinar Series, "Finding Needlesina 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 <sup>th</sup> June 2020.

10.	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, 18th June 2020.
11.	Participated, Savanth An IEEE International Webinar Series, "Reproducibility and Bench marking in AI and Robotics" organized by St. Joseph's Institute of Technology, Department of Electronics and Communication Engineering, 17 <sup>th</sup> June 2020.
12.	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 <sup>th</sup> June 2020.
13.	Presented a paper in the "11th National Symposium cum Workshop on "Recent Trends in Structural Bioinformatics and Computer Aided Drug Design"entitled Jaundb:A Jaundice database Developed using data mining algorithm for therapeutically aid, Department of Bioinformatics,[SBCADD'2019],AlagappaUniversity,Karaikudi,12th-15thFebruary 2019.
14.	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.JCollege of Arts and Science, Pudukottai, 26th-27 <sup>th</sup> September 2019.
15.	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 <sup>th</sup> - 15 <sup>th</sup> October 2019.
16.	Participated"International Conference on Computational Intelligenc eand Applications (ICCIA-2019)", Department of Computational Logistics, Alagappa University, Karaikudi, 8 <sup>th</sup> -9 <sup>th</sup> August 2019.
17.	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 <sup>rd</sup> -24 <sup>th</sup> October 2019.
18.	Participated, "Three-day International Workshop on E-Content Development for MOOCs among the FacultyMembers",Digital Education Cell,Alagappa University,Karaikudi, 10 <sup>th</sup> to 13 <sup>th</sup> September 2019.
19.	Participated, "Two-Day International Conference on RecentTrends in Bioplastics", Department of Microbiology, Alagappa University, Karaikudi, 9 <sup>th</sup> and 10 <sup>th</sup> December 2019.
20.	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> gainst Lung Cancer, Department of Bioinformatics, Alagappa University, Karaikudi, 11 <sup>th</sup> to 13 <sup>th</sup> December 2019.
21.	Presented a paper in the "10 <sup>th</sup> 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].
22.	Presented a paper in the "9 <sup>th</sup> 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].
23.	Presented a paper in the "9 <sup>th</sup> National Symposium cum Workshop on Recent Trends in Structural Bioinformatics and Computer Aided Drug Design" entitled as Computational identification of potent inhibitors for Streptomycin3"-adenylyl transferase of <i>Serratia marcescens</i> [SBCADD'2017].
24.	Participated in the National Workshop on "Career Prospects 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

25.	Participated in the International Workshopon "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.
26.	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.
27.	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.
28.	Faculty Development Program on "Cloud Infrastructure and Services" at Alagappa University, Karaikudi held on 23.02.2015 to 27.02.2015.
29.	Faculty Development Program on 'Free and Open Source Software' at Jaya engineering college held on 23.11.2009 to 27.11.2009.
30.	Anna University Sponsored FDP on "Object-Oriented Analysis and Design" held on 07.05.2007 to 21.05.2007.
31.	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**

#### Refresher Course,

- 1. Refresher Course, UGC-HRDC, Madurai Kamaraj university, Madurai, from 15.03.2023 to 30.03.2023
- 2. Refresher Course, UGC-HRDC, University of Madras, Madras, from 15.11.2022 to 28.11.2022
- 3. Refresher Course, UGC-HRDC Bharathidasan University Thiruchirappalli, from 16.07.2019 to 29.07.2019.
- 4. 100<sup>th</sup> Orientation program, UGC-HRDC, Bharathidasan University, Thiruchirappalli, from 15.11.2017 to 21.12.2017

### Overseas Exposure / Visits

1. Malasia

#### Membership in professional / national / international bodies

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

#### **Recent Research Work:**

- 1. Pass Thought Mind Controlled Authentication with BCI Technology
- 2. Intelligent Diabetic Retinopathy Detection with Deep Transfer Learning Mode
- 3. Experimental and Computational Studies on Phytocompounds Ceretophyllum demersum against Therapeutic Targets

#### **Recent Publications:**

- Muthumanickam Sankar, Balajee Ramachandran, Boomi Pandi, Nachiappan Mutharasappan, Vidhyavathi Ramasamy, Poorani Gurumallesh Prabu, Gowrishankar Shanmugaraj, Yao Wang, Brintha Muniyandai, Subaskumar Rathinasamy, Balakumar Chandrasekaran, Mohammad F. Bayan, Jeyakanthan Jeyaraman, Gurumallesh, "Insilico Screening of Natural Phyto compounds towards Identification of Potential Lead Compounds to Treat COVID-19" Frontiers in Molecular Biosciences July 2021. (Impact Factor: 5.249).
- Thangarasu Suganya Devi, Karuppiah Vijay, **R.M.Vidhyavath**i, Ponnuchamy Kumar, Muthusamy Govarthanan & Thangavel Kavitha, "Antifungal activity and molecular docking of phenol, 2,4-bis(1,1-dimethylethyl)producedbyplantgrowth-promoting **action** bacterium *Kutzneria*sp.strain TSII from mangrovesediments", *Archives of Microbiology* May2021, (Impact Factor: 2.552).
- Sundararaj Rajamanikandan, Soundarapandian Soundarya, Anandhi Paramasivam, Dhamodharan Prabhu, Jeyaraman Jeyakanthan & Vidhyavathi Ramasamy,"Computational identification of potential lead Molecules targeting rho receptor of *Neisseria gonorrhoeae*", Journal of Bimolecular Structure and Dynamics,Feb 2021, (ImpactFactor:3.31).
- JesudassJosephSahayarayan , Kulanthaivel SoundarRajan, RamasamyVidhyavathi , MutharasappanNachiappan,DhamodharanPrabhu,SalehAlfarraj,SelvarajArokiyaraj,Amalorpavana den,NicholasDaniel "Antifungal activity and molecular docking of phenol, 2,4-bis(1,1-dimethylethyl)producedbyplantgrowth-promotingactinobacterium *Kutzneriasp.*strain TSII from mangrove sediments",Saudi Journal of Biological Sciences,January2021,(Impact Factor:4.219).

#### **Book chapter**

Dr. RM. Vidhyavathi Ontology Generation for Semantic Search System using Data Mining Accepted, March 2021 ISBN: 6203471054

**Dr. RM. Vidhyavathi,** S.Nooriya Begam, J.Josephine Sahaya Vergin, C programming language **Under Reveiw** 

#### **Journal Reviewer**

- Journal of Bimolecular Structure and Dynamics
- Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization
- Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization
- Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization

- Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization
- Journal of Bimolecular Structure and Dynamics
- Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization
- Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization
- In International Conference on Recent Trends in Information Technology and its Application ICRTITA'22 during 29th & 30th August 2022. Vel Tech R&D Institute of Science and Technology