# PROFILE: Dr. K. Menaka M. Sc. M. Phil. PGDBM., Ph.D.(CS)., SET.,



Assistant Professor Departments of Computer Science, Information Technology & Applications Shrimati Indira Gandhi College Tiruchirappalli -2.

E- mail : kmenakasigc@gmail.com

# **EDUCATIONAL QUALIFICATION:**

Qualification	Name Of the	Year of Passing	% Of Mark
	Institution		
Ph. D.	Shrimati Indira	2015	-
	Gandhi College,		
	Trichy		
M. Phil.	Shrimati Indira	2005	83%
	Gandhi College,		
	Trichy		
PGDBM.,	Alagappa	2003	75%
	University		
M. Sc.	A.V.C. College,	2002	83.5%
	Mayiladuthurai		
B. Sc.	A.V.C. College,	2000	84.2%
	Mayiladuthurai		

# **EXPERIENCE DETAILS**

Institution Name
D.G.G.A. College, Mayiladuthurai as Guest Lecturer
Programmer, Shrimati Indira Gandhi College
Assistant Professor, Department of Computer Science, Shrimati Indira Gandhi College

## PERSONAL PROFILE

Name : Dr. K. Menaka

Educational Qualification : M.Sc.,M.Phil.,PGDBM.,Ph.D.(CS)., SET.,

Nationality : Indian

Date of Birth : 27.02.1980

Sex : Female

Religion : Hindu

Marital Status : Married

## **Participation in Seminar/Conference Proceedings**

Sl.	Name of the Conference	Year
No.		
1.	Participated in a One-Day workshop on "ANDROID DEVELOPMENT" at BUTP,	2016
	Tiruchirappalli	
2.	Participated in A One -Day Inter-Collegiate Workshop on "E-CONTENT	2015
	DEVELOPMENT FOR TEACHING –LEARNING PROCESS" at Jamal Mohammed	
	College, Tiruchirappalli.	
3.	Participated in the National conference on "RECENT TRENDS IN ENGINEERING	2013
	AND TECHNOLOGY" organized by Sri Raja Rajan College of Engineering and	
	Technology", Karaikudi on 4 <sup>th</sup> February.	
4.	Third Inco-US Lecture Series on "DISCRETE MATHEMATICAL CHEMISTRY:	2008
	SPECIAL LECTURES ON BIOINFORMATICS AND CHEMOINFORMATICS"	
	Organized by Department of Bioinformatics, Bharathidasan University, Tiruchirapalli.	

## **Presentations in Seminar/Conference Proceedings**

Sl. No. Title of Paper		Name of the Conference	Page No.	Year
1.	IMPACT OF BIOLOGICAL DNA SEQUENCES IN AUGMENTING CYBER SECURITY	International Conference on "Challenges and Response of Organization during Turbulent Global Business Environment" organized by Primax Foundation during 4 <sup>th</sup> June 2019 at Singapore.  ISSN No. 2394-2886	25 - 28	2019
2.	COGNITION IMPROVED NEURAL NETWORK SCHEME FOR DETECTING RARE MOTIFS IN DNA SEQUENCES	International Conference on Intelligent Computing Applications, ICICA 2014 held during March 6 - 7, 2014 in Bharathiar University. Published in IEEE Xplore – Digital Library ISBN-13: 978-1-4799-3966-4	18-21	2014
3.	MESSAGE ENCRYPTION USING DNA SEQUENCES	International conference on "World Congress on Computing and Communicating Technology", WCCCT'14 held during February 27 <sup>th</sup> to March 1 <sup>st</sup> 2014 at St. Joseph's College, Trichy Published in IEEE Xplore – Digital Library <b>Print ISBN:</b> 978-1-4799-2876-7	182- 184	2014
4.	CLOUD COMPUTING  - APPLICATIONS IN BIOINFORMATICS	National symposium on Cloud Computing organized by Bharathidasan University in association with Shrimati Indira Gandhi College and CSI Trichy chapter during 27 <sup>th</sup> Sep. 2012	-	2012
5.	FORTIFIED INFORMATION ENCRYPTION WITH BIOLOGICAL SEQUENCE DATA	DST Sponsored National conference on Applications of Data Mining on National Security organized by Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Enathur, Kanchipuram during 30 <sup>th</sup> and 31 <sup>st</sup> August, 2010. ISBN:978-93-8697-51-2	76-81	2010
6.	AN ARTIFICIAL NEURAL NETWORK DESIGN FOR DETECTING RARE EVENTS IN DNA SEQUENCES	International Conference on "Recent Trends in Computing and Communication" organised by Dhanalakshmi Srinivasan College(W), Perambalur, 27th Feb. 2010.	64-70	2010
7.	A NOVEL SEQUENCE ENCODING METHOD FOR SEARCHING RARENESS AMONG CONSENSUS DNA SEQUENCES	National Workshop sponsored by Department of Biotechnology (DBT) on Structural and Functional Genomics – an Insilico Approach held at Sub Distributed Information Centre (SUB DIC), Central Agricultural Research Institute (CARI), Port Blair, Andaman & Nicobar Islands during 26-28 February	54-60	2009
8.	A COMPUTATIONAL TOOL FOR QUANTITATIVE COMPARISON OF	National Conference on Bioinformatic Tools for Gene and Protein Analysis at Shrimati Indira Gandhi College, Tiruchirappalli-2 during 7-8 September	33-37	2007

	RELATEDNESS OF			
	TWO DNA			
	SEQUENCES			
9.	SEQUENCE	State Level Seminar on Computer oriented		2007
	ANALYSIS- AN	mathematical Techniques 2007 (SLSCOMT-		
	APPROACH USING	2007) at Shrimati Indira Gandhi College,		
	FINITE	Tiruchirappalli-2 during 10-11		
	DIFFERENCES	August		

#### **Publications in Scientific Journals**

No.PaperJournalNo.1 PREDICTING THE BIRTH OF HEALTHY BABIES WITH GESTATION PERIOD OBSERVATIONS USINGMACHINELEARNING ALGORITHMINTERNATIONAL SCIENCES AND ENGINEERINGVol. 7, Issue 32752.A HYBRID CRYPTOGRAPHIC ALGORITHM BASED ON MATRIX ALGEBRA USING DNA SEQUENCES AND S-BOXESINTERNATIONAL JOURNAL OF RESEARCH IN ELECTRONICS ANDVOL. 7 ISSUE 1pp. 530 533 533	2019
HEALTHY BABIES WITH GESTATION PERIOD OBSERVATIONS USINGMACHINELEARNING ALGORITHM  2. A HYBRID CRYPTOGRAPHIC ALGORITHM BASED ON MATRIX ALGEBRA USING DNA SEQUENCES AND S-BOXES  JOURNAL OF ISSUE 530 - 1 533	
PERIOD OBSERVATIONS USINGMACHINELEARNING ALGORITHM SCIENCES AND ENGINEERING  2. A HYBRID CRYPTOGRAPHIC ALGORITHM BASED ON MATRIX ALGEBRA USING DNA SEQUENCES AND S-BOXES COMPUTER SCIENCES AND ENGINEERING INTERNATIONAL JOURNAL OF ISSUE 530 - RESEARCH IN 1 533	2019
USINGMACHINELEARNING ALGORITHM ENGINEERING  2. A HYBRID CRYPTOGRAPHIC ALGORITHM BASED ON MATRIX ALGEBRA USING DNA SEQUENCES AND S-BOXES SCIENCES AND ENGINEERING INTERNATIONAL JOURNAL OF ISSUE 1 530 - 1 533	2019
ALGORITHM ENGINEERING  2. A HYBRID CRYPTOGRAPHIC ALGORITHM BASED ON MATRIX ALGEBRA USING DNA SEQUENCES AND S-BOXES  ENGINEERING INTERNATIONAL JOURNAL OF ISSUE 530 - RESEARCH IN 1 533	2019
2. A HYBRID CRYPTOGRAPHIC ALGORITHM BASED ON MATRIX ALGEBRA USING DNA SEQUENCES AND S-BOXES  INTERNATIONAL JOURNAL OF RESEARCH IN 1 533 ELECTRONICS AND	2019
ALGORITHM BASED ON  MATRIX ALGEBRA USING DNA  SEQUENCES AND S-BOXES  JOURNAL OF RESEARCH IN 1 530 - 1 530 - 1 533	2019
ALGORITHM BASED ON  MATRIX ALGEBRA USING DNA SEQUENCES AND S-BOXES  JOURNAL OF RESEARCH IN 1 533  ELECTRONICS AND	
SEQUENCES AND S-BOXES ELECTRONICS AND	
COMPUTER	
ENGINEERING	
ISSN: 2348-2281	
3. ENCRYPTING INFORMATION USING INTERNATIONAL VOL. 6 pp.	2018
DNA SEQUENCES WITH MATRIX JOURNAL OF ISSUE 1586-	
ALGEBRA RESEARCH IN 3 1590	
ELECTRONICS AND	
COMPUTER	
ENGINEERING	
ISSN: 2348-2281	
4. ENHANCING INFORMATION International Journal Volume 482-	2017
ENCRYPTION WITH of Advanced 8, No. 485	
BIOMOLECULARSEQUENCES USING Research in 9,	
NDES ALGORITHM Computer Science	
ISSN No. 0976-5697	
5. A NEW APPROACH TO International Journal of Volume 444-	2016
DNA CRYPTOGRAPHY USING 8X8   Science and Research   5 Issue   446	
PLAYFAIR CIPHER AND (IJSR) 8,	
RAMANUJAM SQUARE MATRIX ISSN (Online): 2319-	
7064	
Index Copernicus Value	
(2013): 6.14	
Impact Factor (2015):	
6.391	
6. SECURE MESSAGE TRANSFER USING International Journal of Vol. 9, 1-6	2016
DNA SEQUENCES Computational No.1	
Intelligence in	
Bioinformatics	
ISSN: 0973-385X	

7.	COGNITION ENHANCED ANN MODEL FOR THE DETECTION OF RARE EVENTS IN DNA REPEAT SEQUENCES	Advances in Computation Sciences and Technology ISSN 0974-4738	Vol. 6, No.1	33-45	2013
8.	MATHEMATICAL LENSING OF DNA REPEAT SEQUENCES	International Journal of Computational Intelligence in Bioinformatics ISSN: 0973-385X	Vol. 3 No. 3	257 - 265	2010
9.	A STATISTICAL METHOD FOR VERIFICATION OF RARENESS IN DNA SEQUENCES USING SEQUENCE ENCODING	Online Journal of Bioinformatics ISSN 1443-2250	10 (1)	74-81	2009

## Participation in Orientation/Refresher/Training/ Faculty Development Programmes

Sl.	Name of the Conference	Year
No.		
1.	Participated in two days National Level Workshop on "NAAC Awareness Programme" conducted by Primax Foundation at Bangalore	2019
2.	Attended a Faculty Development Programme on "CLOUD INFRASTRUCTURE AND SERVICES" Organized by ICTACT at K.Ramakrishnan Collge of Engineering, Tiruchirappalli	2016
3.	Attended a training programme on Android OS at SIGC, Trichy.	2013
4.	Attended an Orientation Programme at Kajamalai Campus, Bharathidasan University.	2012
5.	Attended a skill based Training Programme on Multicore Programme Organized by ICT Academy.	2011
6.	Attended a training programme on .Net at SIGC, Trichy	2010

#### **Other Details:**

Qualified State Eligibility Test (SET) 2016 conducted by Mother Terasa University during February 2016.

## M. Phil Guideship details

S.No.	Name of the Student	Reg. No.	Year & FT/PT	Project Title
1.	B. VIGNESWARI	2K15FT- 43283	2015 FT	A NOVEL APPROACH FOE EFFECTIVE SEARCH ON GRAPHS WITH WEIGHTED ATTRIBUTES.
2.	R. RAMYA	2K15PT- 44732	2015 PT	PERIODICAL HEALTH CHECK-UP IN POST – DISASTER CONDITION USING MOBILE HEALTH CARE METHODS.
3.	A.KARTHIKA	2K16FT- 16556	2016FT	TIME DELAYED BROADCASTING FOR DEFEATING RE-ACTIVE JAMMER USING 3DES ALGORTHM AND LINEAR TIME SERIES TECHNIQUES
4.	P. BAVANI	2K16PT 17871	2016PT	A WEB-BASED SMS ALERT SYSTEM TO FACILITATE STUDENT SUPPORT SERVICES
5	PRIYA R	2K17FT- 18535	2017FT	ISOLATED POSITIVE AND PRECISE SPECTRAL CLUSTERING WITH OPTIMIZED SOLUTION
6.	SUNDARAVALLI V	2K17FT- 18545	2017FT	A NOVEL APPROACH FOR ENHANCING INFORMATION ENCRYPTION USING BIOMOLECULAR SEQUENCES
7.	ARTHI V	2K17PT 19787	2017PT	AN ANALYSIS OF DETECTING RANK FRAUD & MALWARE PRACTICES USING DATAMINING TECHNIQUES
8.	KEERTHANA KANI B	2K18FT 20415	2018FT	PREDICTING THE BIRTH OF HEALTHY BABIES WITH GESTATION PERIOD OBSERVATIONS USING MACHINE LEARNING ALGORITHMS
9.	VISHALINI M	2K18FT 20429	2018FT	A HYBRID CRYPTOGRAPHIC SYSTEM BASED ON MATRIX ALGEBRA USING DNA SEQUENCES AND S-BOXES