

Dr. PALURI .V. S.LAKSHMI JAGADAMBA

Professor and Head

Department of Computer Science & Engineering

GVP College of Engineering for women, Visakhapatnam,

Andhra Pradesh, India 530045.

Mobile: **09848483016**

Email: lakshmipulugurtha@gmail.com drpvsljagadamba@gvpcew.ac.in

1. EDUCATION QUALIFICATIONS:

1. Ph.D in Computer Science & Engineering at Andhra University College of Engineering, Andhra University February 2014.
2. M.Tech in Information Technology at Andhra University College of Engineering, Andhra University 2004-2006, First Class & distinction 80%.
3. AMIE in Computer Science & Engineering at Institute of Engineers, India (IEI) with CGPA of 7.82, October 2017.

2. ACADEMIC AWARDS:

1. Completed NPTEL online course on "Python for Data Science" with a score of 72% during August-September 2019
2. Chaired a session at IEEE International Conference on Intelligent Systems and Green Technology ICISGT – 2019 during 29th & 30th June 2019 organised by IEEE Vizag Bay Sub Section and IEEE Hyderabad Section at Visakhapatnam India.
3. Chaired a session at the International journal of Arts and Sciences (IJAS) International conference for academic disciplines which was held at Harvard Medical school new research building, Harvard University and MIT Boston, USA during May 28th to June 1st 2019.
4. Completed NPTEL online course on "Data Science for Engineers" with a score of 77% during January-April 2019
5. Completed NPTEL online course on "Programming, Data Structures and Algorithms Using Python" with a score of 70% during August-October 2018
6. Certified as a Micro Certification has successfully completed the rigorous requirements and testing set forth by cybrary and cybrary's education committee, establishing proficiency in the following skill (Intrusion Detection System / Intrusion Prevention System) IDS/IPS with a score of 80% and awarded a total of 4 CPE/CEU Credit Hours created and backed by the cybrary educational committee-Cybrary Inc. info(@) cybrary.it ,7833 Walker Dr Suite 510 Greenbelt, MD 20770-USA-June 2017.
7. Reviewer of an International Journal of Advanced Research in Science and Technology (IJARST), ISSN 2319-1783(P) & ISSN 2320-1126 (Journal Impact Factor:2.179), in the areas of Bioinformatics , Data Mining.
8. For the research work entitled , "A Processor Responsible for Type II Diabetes Mellitus Implementing & Analysis of Genomic Signal Processing ",awarded a Gold Medal, by ®Intel India Embedded

Challenge (Intel IEC) 2012” , held on August 22nd 2012, at Bangalore, India.

9. The extension of the above problem (prototype) got selected for incubation by DREAM:IN is a global movement, a massive online open innovation platform and creative incubator in September 2013.

3. **PATENT FILLED:** Patent Applied Docket Number: 44706 Application Number: 201641037178, Invention Details “**System for Detection of Application Layer Attacks**”, dated of filling August 29th 2016.

4. **EXTERNAL GOVERNMENT FUNDED RESEARCH PROJECT:**

1) **PROJECTS COMPLETED :**

1. A project for Rs 17,52,000/- from Department of Science & Technology (DST) , Government of India ,entitled “ INSILICO ANALYSIS OF BRAIN DERIVED NEUROTROPHIC FACTOR(BDNF) A PROTEIN WHICH MIGHT HELP TO CONTROL DIABETES ”, Principle Investigator Women Scientist Scheme (WOS-A) JNTU Kakinada during December 2010 – June 2012.
2. A project for Rs 9,55,000/- from University Grants Commission (UGC) , Government of India ,entitled “STATISTICAL MODELS FOR PREDICTION OF FINANCIALEVENTS USED DATA MINING ”, (Major Research Project sponsored by UGC) Principle Investigator Department of Computer Science ,GVP College for Degree & PG Courses Rushikonda, Visakhapatnam during February 2009 -2012.

5. **RESEARCH CONTRIBUTION:**

Proposed Area: Developing an algorithm for detecting distributed denial of service (DDoS) attacks using intrusion prevention systems at application layer.

Background: The Internet of Things (IoT) is the network of physical objects or "things" embedded with electronics, software, sensors, and network connectivity, which enables these objects to collect and exchange data. These systems not only interconnect small devices, they also exchange critical data pertained to devices.

Although this interconnection setup brings many advantages, it also sprouts vulnerabilities and threats, in the form of cyber attacks flooding type of attacks (most common type of DDoS attack which involves flooding the target resource with external communication request). In such complex scenario, the ability to detect attacks as early as possible is of paramount importance.

Research Methodology: Started literature survey in this space. We intend to focus on DDoS attack, which is a malicious attempt to make server or **network-based intrusion**. We attempt to investigate the problem of early efficient detection of application layer attacks and to propose alternative anticipative

solution. As part of this process, we plan to develop an efficient algorithm and create a simulated environment which makes detection and prevention.

6. RESEARCH GUIDANCE:

1. Published more than 10 publications in various international and national journals/conference.
2. Guided more than 16 post graduate students in various of verticals

7. AREAS OF INTEREST:

Digital Logic Design, Operating System, Distributed Systems, File Structures, Database Management Systems, Data Ware Housing & Data Mining, Systems Programming, Computer Organization, Distributed Database Systems.

8. RESEARCH PROJECT PROPOSALS:

1. **Proposed Area:** "To Develop and Simulate Software for Drug Design Using DNA and Protein Sequence", For incubation by a Bangalore based organization- DREAM:IN) during the year 2012-2013 :

Summary: The aim of the project is to develop an analytic engine that provides a warning to diabetic patients. The objective is to help the patients in diagnosing of the diabetes at the early stage, if any, at cheaper cost. Emotional Connection: In CHIRON LABS the major goal of translational genomics is to discover families of genes whose products (messenger RNA and protein) can be used to classify disease, thereby leading to molecular-based diagnosis and prognosis. Developed a system namely hotspot identification system in a primary protein structure (HISPPS) using MSAPSO to identify all the hotspots in protein primary protein structure. These Hotspots are very important in the preparation of new drugs as they are actually binding themselves to form a new three dimensional structure.

2. **Proposed Area:** "A Processor Responsible for Type II Diabetes Mellitus Implementing & Analysis of Genomic Signal Processing", Research Project work Submitted and Completed to Intel® India, January 30, during 2011-2012.

Summary: The aim of the project is to study to identify the genes in general that cause type 2 Diabetes Mellitus. In this process genomic signal processing technique is used to convert diabetes gene / protein sequence into a signal processor. It is a trans-disciplinary approach provides a systematic, comprehensive theoretical framework for the definition and analysis of two or more disciplines. This focuses on the development of new methods and programs aiming to help solving molecular biology problems. A sensor is developed for the analysis of the genomic signal processing system. This sensor provides a warning to diabetic patients.

This idea will become game changer diabetes and hypertension is major ailments in the current society, so the institution is taking responsibility to minimize the diabetes problem for disease free society. – For the above research work Intel® India, has awarded a Gold Medal from Embedded Challenge 2012 on August 22nd 2012.

9. MEMBERSHIP IN PROFESSIONAL BODIES:

1. Certified as a “Member – Convener “ of membership development and Professional Activates committees of the Institute of Electrical and Electronics Engineers (IEE) vizag bay sub section for the year 2016 and annual member of IEEE up to year December 2020.
2. M.I.E (Member India Institute of Engineers).
3. Computer Society of India Institution Nominee Member (CSI).
4. Annual member of Association of Computing Machinery (ACM-2017).

10. PAPERS PUBLISHED IN VARIOUS INTERNATIONAL JOURNALS:

1. Dr. P.V.S. Lakshmi Jagadamba, “A Significance Method for Identifying Translational Genome Inter Nucleotide Signals Using Messenger RBA (MRNA)”, published in IEEE Xplore: <http://ieeexplore.ieee.org/document/7955850/> in June 2017
2. Dr. P.V.S. Lakshmi Jagadamba , “Multiple Sequence Alignment Algorithms for a Protein Structure for a Biological Data using Dynamic Programming Method “,Journal of recent trends in programming languages, Vol 1, Issue 1 ,RTPL (2014) 1-7 © STM Journals March 2014., PP 1 – 7.
3. P.V.S. Lakshmi Jagadamba, Prof. M.S.PassadBabu, Prof. AllamAppa Rao (2012), “Efficient Protein Interaction Hotspot Identification in Proteins”, International Journal of Engineering and Development (IJERD), ISSN: 2278-067X, Volume 1, Issue 8, PP 08-11.
4. P.V.S. Lakshmi Jagadamba, Prof. M.S.PassadBabu, Prof. AllamAppa Rao (2012) “Hotspot Identification System for identification of core residues in Diabetic Proteins”, Global Journal of Computer Science & Technology, USA , Volume- XII, Issue – 1, Version 1 , ISSN:0975-4350, PP 47-52.
5. P.V.S.LakshmiJagadamba , P.K.Subba Rao (2011), “Genomic Signal Processing In Analysis Of A Glucose Level Responsible For A Type 2 Diabetics Gene Through Non-Invasive Indigenous Method”, International Journal of Bioinformatics and Soft Computing , Research Science Press (India) January-June ,Volume 1, Issue 1,PP 43-53.
6. P.V.S. Lakshmi Jagadamba, Prof. M.Surendra Prasad Babu, Prof. AllamAppa Rao, P.KrishnaSubba Rao, Mr. T. M. N. Vamsi (2010) “A Novel Approach for Pair Wise Alignment Using Particle Swarm Optimization”, International Journal of Computational Intelligence Research & Applications , July-Dec 2010, Volume 4 , Number 2, ISSN 0973 – 6794, PP 157 – 160.
7. P.V.S.LakshmiJagadamba , P.K.Subba Rao (2010) , “Computational Clustering Technique of a Nonlinear Unconstrained Functions using Bio Markers”, International Journal of Computer Sciences and Information Technology,

ISSN: 0974 – 8385, issue of the journal, January-June , Volume 3, Issue 1, PP 179 -184.

8. P.V.S.Lakshmi Jagadamba , P.K.Subba Rao (2010) “ Intrusion Tolerant Enhanced Secured Architectural Database System”, International Transactions in Mathematical Sciences and Computer (ITMSC), ISSN 0974-5068, Volume 3, Issue 1, PP 45-53.
9. P.V.S. Lakshmi Jagadamba, Prof. P.S Avadhani (2006), “Database Security”, Journal of Andhra Pradesh Akademi of Sciences, Vol. 10(2) June PP 178-181.

11. PAPERS PRESENTED/PUBLISHED IN VARIOUS INTERNATIONAL CONFERENCES:

1. Presented a paper “Prevention of DDoS Attacks at Application layer using Fisher’s Z Model ”, for themed presentation at the international Conference of Art and Science international conferences for academic disciplines held at Harvard Medical School , New Research Building ,77 Avenue Pasteur, Boston ,Massachusetts.
2. Presented a poster presentation “Method And Apparatus for detecting Denial of Service Attacks” at the international Conference of Art and Science international conferences for academic disciplines held at Massachusetts Institute of Technology ,255 Massachusetts Avenue , Cambridge ,
3. Presented a paper for themed presentation “Detecting Distributed Denial of Service Attacks Using Intrusion Prevention Systems” ,on thirteen international conferences on technology, knowledge and society and technology, at chestnut Conference centre, university of Toronto, Toronto, Canada on 27th May 2017.
4. Presented a paper on “An Algorithmic Approach to Calculate Fault Tolerant to a Gene-Gene Network Using Graph-based MapReduce Programming Framework Architecture”, on Thirteen International Conferences on Technology, Knowledge and Society, at Chestnut Conference Centre, University of Toronto, Toronto, Canada during 27-29 May 2017
5. Presented and published a paper on, ” Implementation of PSO Algorithm for Genomic Sequences Calculating the peaks at $N/2$, $N/3$ ” an International Conference on computer , Electrical, Systems, Science and Engineering ‘, World Academy of science , Engineering and Technology , Singapore on 28th September to 30th September 2011, pp 1096-1100.
6. Presented and published a paper on, “A Particle Swarm Optimization Based Multiple Sequence Alignment”, Proceedings of IEEE 2nd International Conference on Software Engineering and Service Science (ICSESS2011) Beijing, China, 15-17 July 2011, PP 133- E135.
7. Presented and published a paper, “ Invertability Issues of Truncated Polynomials in NTRU Cryptosystems”, Proceedings of the an International

Conference on Security and Management SAM 2008, Las Vegas USA, 14th July – 17th July 2008, pp 34-37.

8. Presented and published along with Prof P.S. Avadhani (2006) "Implementing Shared Generation of RSA Keys", proceedings of International Conference on The 10th World Multi- Conference on Systemics, Cybernetics and Informatics (WMSCI-2006) , Orlando, Florida, USA, 16-19 July 2006 pp 82-85.
9. Presented and published along with P.K.Subba Rao (2006) "Architectures for Intrusion Tolerant Database Systems", Proceedings of The International Conference of e-Security, Computer Society of India, Visakhapatnam, 24– 26 February 2006, Page No 140-146.

12. PAPERS PUBLISHED IN VARIOUS NATIONAL CONFERENCE:

1. Ms. P.V.S. Lakshmi Jagadamba , Mr. T. Vamsi Mohan, " A particle swarm optimization based multiple sequence alignment " , proceedings of a national seminar on translation research in bio informatics &T2DM", 17th to 18th April 2011, ISBN-978-81-921799-1-9, volume 1,pp91-97.
2. Ms. P.V.S. Lakshmi Jagadamba , " Optimization of Uncondtrained functions using Particle Swarm Optimization" a national Conference - NITAC-'10, Bannar Ammman Institute of Technology , sathyamangalam – 63. , 7th to 18th April 2011, ISBN-978-81-921799-1-9, volume 1,pp91-97.

13. ORGANIZING SEMINARS / CONFERENCES:

- 1) Organized “Three Day Workshop on Gateway to R&D” during 28th -30th August 2017.
- 2) Organized Two Day Workshop on “Transact SQL Foundation Course” during 8th – 9th March 2017.
- 3) Organized three day national level Faculty Development Program on “BIG DATA ANALYTICS” during December 16th – 18th 2016.
- 4) Organized Workshop on “Android Application Development” during September 12th – 16th 2016.
- 5) Organized two day CSI state level student convention during January 22nd and 23rd 2016.
- 6) Organized a Training Program on “Dot net Fundamentals (Microsoft Technology Associate)” during October 5th to 17th 2015.
- 7) Organized a two Day Workshop on “Application Development on Android Technology” during December 29th and 30th 2014.
- 8) Organized a two Day Workshop on “Application Development on Cloud Technology” during December 26th and 27th 2014.
- 9) Organized a two day workshop on “Ethical Hacking” during July 17th -18th 2014.
- 10) Organized a two day seminar on “Data Mining and Ware housing” from April 4th -5th 2008.
- 11) Organized a one day workshop on “Digital Signal Processing and Embedded Systems” on 12th April 2008.
- 12) Organized a two day international workshop on trans disciplinary education and research (IWTER-2007), held at Andhra University College of Engineering (Autonomous), on 23rd October 2007 and 24th October 2007.

14. WORKSHOP / SEMINARS / CONFERENCES ATTENDED:

- 1) Participated in One Day National Workshop on “Quality Measures in Technical Education” Organized by Gayatri Vidya Parishad College of Engineering (Autonomous) on March 18th 2017.
- 2) Attended and presented a paper “A Significance Method for Identifying Translational Genome Inter Nucleotide Signals Using Messenger RBA (MRNA)”, in International Conference on Signal Processing, Communication, Power and Embedded System (SCOPE5 -2016), organized by Centurion University of Technology and Management, Odisha during 3rd -5th October 2016.
- 3) Participated and presented a poster entitled “Implementation of Big data analytics for a Gene-Gene Network Analysis using Fault Tolerant Graph Based Architecture” in National Symposium on Distributed and Embedded High Performance Computing organized by IIT Bombay during 1st - 4th June 2016.
- 4) Participated a two day National Workshop on “Advances in Web mining and Big data” organized by Department of Computer Science and Systems Engineering, Andhra University on 18th -19th December, 2014.

- 5) Attended a two day International conference on “Computational Intelligence: Health and Disease” organized by Institute of Bioinformatics and computational Biology (IBCB), Visakhapatnam on 27th – 28th December 2014.
- 6) Attended a two day Workshop on “Recent Trends in Bioinformatics” organized by Institute of Bioinformatics and computational Biology (IBCB), Visakhapatnam on 17th -18th May 2014.
- 7) Attended a two day Workshop on “Bioinformatics Tools in Diabetic Research” organized by Institute of Bioinformatics and computational Biology (IBCB), Visakhapatnam on 16th -17th August 2014.
- 8) Attended in Two Day National Conference on Artificial Intelligence, Robotics, and Embedded Systems (AIRES 2012) organized by Department of Computer Science and Systems Engineering, Andhra University during 29th a-30th June 2012.
- 9) Attended Two day conference on “Bio-Informatics and beyond” Organized by Ramanujan, JNTU, Kakinada, Department of Science and Technology along with AIMSCS, Visakhapatnam on 30th Nov- 1st Dec 2011.
- 10) Attended Five Day Workshop on “Statistical and Mathematical Modelling including data Collection on Analysis” Organized by Ramanujan, C R Rao AIMSCS, Hyderabad on 17th to 21st October 2011.
- 11) Presented a paper on “Implementation of PSO Algorithm for Genomic Sequences calculating the Peaks at $N/3$, $2N/3$ ” in a three day International Conference on Computer, Electrical, Systems, Science and Engineering Organized by World Academy Of Science, Engineering and Technology Singapore, on 28- 30 September 2011.
- 12) Presented a paper “A Particle Swarm Optimization Based Multiple Sequence Alignment” in a three day 2nd International Conference on Software Engineering and Service Science Organized by ICSESS2011 IEEE, Beijing, China on 15-17 July 2011.
- 13) Attended and presented a paper on “Implementation of An Improved Algorithm for Multiple Sequence Alignment Using Particle Swarm Optimization” in a two National Seminar on Translational Research in Bioinformatics & T2DM Organized by GVP College for Degree & PG Courses, Visakhapatnam on -18 April 2011.
- 14) Attended 2nd National Workshop on “Data Engineering” Organized by Department of CSSE, AU Collwege of Engineering, Andhra University, Visakhapatnam on 26th March 2010.
- 15) Attended and presented a paper on “Invertability Issues of Truncated Polynomials in NTRU Cryptosystems” in a two International Conference on Security and Management SAM 2008 organized at Las Vegas USA, during 14–17 July 2008.
- 16) Attended One Day Orientation and Retraining Program on “Communication and Soft Skills” for College teachers Organized Department of English, GVP

College For Degree and PG Courses(A), Visakhapatnam on 14th December 2008.

- 17) Attended Two Day Workshop “International Conference on Data mining and Stochastic Models” Organized at Andhra University, Visakhapatnam on 29th Jan – 1st Feb 2008.
- 18) Attended one day National Workshop on “Data Mining and Business Intelligence” organized at Chaitanya Engineering College Visakhapatnam on 11th - 12th August 2007.
- 19) Attended five day National Workshop on “Search and Mining Engines and Their Applications” organized at GITAM College of Engineering Visakhapatnam on 9th - 13th June 2006.
- 20) Attended and presented paper entitled “Architectures for Intrusion Tolerant Database Systems” three day International Conference of “e-Security” organized on Computer Society of India, Visakhapatnam Chapter, Visakhapatnam on 24th -26th February 2006.

15. REFRESHER COURSES / ORIENTATION PROGRAMS ATTENDED:

- 1) Attended a Refresher Course on “Industrial Network Management (INM)” at G.V.P. College of Engineering for Women, Visakhapatnam during 02nd -15th March 2010.
- 2) Attended a Refresher Course on “Bio-Informatics and Speech Recognition” at 99G.V.P. College of Engineering, Visakhapatnam during 21st -26th July 2008.
- 3) Attended a Refresher Course on “E- Business” at Institute of public enterprises, OSMANIA University Hyderabad during 1st - 23rd March-2004.
- 4) Attended an Orientation Program on “BCA Program Curriculum” at Academic Staff College Andhra University, Visakhapatnam Hyderabad during 17th - 29th January 2000.

16. PROJECTS GUIDANCE FOR UNDER GRADUATE AND POST GRADUATE STUDENTS:

Some of the recent projects are mentioned below.

- 1) Project entitled “Feedback Analysis System” by M.D. Harika, P GunaTeja, L Sebareesh and P Manoj Yadav
- 2) Project on “LOG Analytics: A Case Study on Computer log files using Hadoop Framework” by I Ravikanth, K Suma, B Roja and L Pratyusha
- 3) Project on “Faculty Management System” by P Lakshmi Koulini, BNeelima Rose and G Ravi Teja
- 4) Project on “Anti – Phishing Framework based on Visual Cryptography” by ChSrinivas, G Dinesh and M Mohan
- 5) Project on “Design and Implementation of Academic Cloud” by M K Pruthvi, A Gayathri and S S Priyanka Rao
- 6) Project on “Hospital Management System” by G KeerthiVarshini, R GirishBabu, K Chanoja and A K Rahul

- 7) Project on “Online Examination System” by K Aksha, M Srikanth, P rama Pavani and M Rohit Sameer
- 8) Project on “Web History Analytics” by T Harshini, GGS Sampath, D Balu and T Satish

17. PROFESSIONAL EXPERIENCE : 20 Years

- 1) January 2018 – Till date as Professor , Department of Computer Science And Engineering, G.V.P. College of Engineering for Women, Madhurawada, Visakhapatnam
- 2) June 2014 – January 2018 as Professor, Head of the Department of Computer Science Engineering, School of Engineering, Technical Campus, Gayatri Vidya Parishad College for Degree & PG Courses, Visakhapatnam.
- 3) June 2012 – May 2014 as Associate Professor, Department of Computer Science and Engineering, School of Engineering, Technical Campus, Gayatri Vidya Parishad College for Degree & PG Courses, Visakhapatnam.
- 4) Worked as an WOMEN SCIENTIST, WOS(A) , Department of Science & Technology –JNTU- Kakinada- December 2010- June 2012.
- 5) August 2005 to – December 2010, as Associate Professor of Computer Applications, at GVP College for Degree and PG Courses Visakhapatnam, Andhra Pradesh, India.
- 6) September 2001 – August 2005, as Asst. Professor of Computer Application, at GVP College for Degree and PG Courses Visakhapatnam, Andhra Pradesh, India.
- 7) March 1999 – March 2000, as Lecturer of Computer Applications, at GVP College for Degree and PG Courses Visakhapatnam, Andhra Pradesh, India
April 2000 – August 2001 as a Software Developer ,QatalysInc, Texas USA.

18. PERSONAL DETAILS:

Date of Birth: 04-06-1974.

Address for correspondence: MIG 62(A.U),#2-48-5, SECTOR XI, M.V.P. COLONY, VISAKHAPATNAM, ANDHRA PRADESH, INDIA- 530017.