

Name: Dr. I. Lakshmi M.Sc., M.Phil., Ph.D Subject: Computer Science Address for Communication: Plot No: 20, G1,"THAI FLATS", Shanmugam Sundaram Street, Devaraj nagar (extn), Saligramam, Chennai-93 Email Address: <u>ravilaccs@gmail.com</u> DOB: 5-08-1979 Mobile No: 9677051822

Qualification: M.Sc., M.Phil., Ph. D (computer Science)

Title of the PhD Thesis: "Automatic web service composition using semantic web technologies"

Previous Teaching Experience: [11 years- UG(11years) & PG(9yrs)]

Oct 2003-Apr 2004. As Guest Lecturer in Bharathiyar University Coimbatore.

At the same period of work Oct 2003-Apr 2004. As OT (Over Talent) for MKU DDE in Coimbatore.

Aug 2005 – Jan 2006. As Guest Lecturer in School of Business Studies, Madurai Kamaraj University.

Jan 2006-April 2008. As Lecturer (Temporary) in Department of Computer Science (Directorate of Distance Education) Madurai Kamaraj University.

May 2008 – May 2010. As Lecturer in Department of BCA in Jyoti Nivas college Bangalore

At the same period of work May 2008 – May 2010. As Lecturer for IGNOU study centre in Jyoti Nivas college Bangalore.

June 2013 – May 2020. As Assistant Professor in Department of Computer Science, Stella Maris college, Chennai.

June 2020-September 2020 -As a freelancer as a content developer for technical courses for Naresh technologies at Hyderabad.

October 2020-August 2022-As an online tutor for the course of coding in Lido Learning, Mumbai.

At present September 2022-As part time content developer for Solvephile company and Infinity Solutions.

Areas of Interest:

- C, C++.
- Software Engineering, Computer Networks
- Visual Basic, Microprocessor
- Embedded system, Computer organization
- Computer Graphics, UNIX
- Web services, Web designing, Data mining, Software Testing
- IOT, Python, Cloud Computing, GIMP, FLASH
- LATEX, R, MATLAB,

Papers Published:

- "Computation of Interaction Potential of adsorbents on Zig-zag SWCNTS Application to Functionalization and Hydrogen Storage" I.Lakshmi, D. Silambarasan, V. J. Surya, M. Rajarajeswari and K. Iyakutti International Journal of Nano Science. (2011) 10, 391-396.IF: 0.34
- "Hydrogen storage in TiO₂ functionalized (10, 10) single walled carbon nanotube (SWCNT)-First principles study R. Lavanya, V. J. Surya, I. Laksmi, K. Iyakutti, V. Vasu, H. Mizuseki and Y.Kawazoe International Journal of Hydrogen Energy 39 (2014) 4973-4980. IF: 4.054
- 3. "Functionalized Single-walled carbon nanotube (5, 0) as a carrier for Isoniazid A Rajarajeswari, K. Iyakutti, tuberculosis drug", M. I. Lakshmi. R. Rajeswarapalanichamy and Y. Kawazoe International Journal of Computational Engineering Materials Science and 4 (04)(2015)1550014, DOI:10.1142/S2047684115500141.IF:0.25.
- "Effect of surface doping on the band structure of graphene: a DFT study" K. Iyakutti E. Mathan Kumar I. Lakshmi, Ranjit Thapa, R. Rajeswarapalanichamy, V. J.Surya and Y. Kawazoe Journal of Materials Science: Materials in Electronics, (2016), 27: 2728–2740. IF: 2.019
- 5. **I. Lakshmi**, Dhanalakshmi G.D "A Review on Mobile Cloud Learning In Higher Education" IJERA Volume. 6, Issue 4, April 2016, pg: 32-38.IF: 2.737
- I. Lakshmi "Current Trends in Agriculture and Food Industry using Wireless Sensor Technologies", International Journal of Computer Science and Mobile Computing, (IJCSMC), Volume. 5 and Issue. 5, May 2016, pg.448 – 463, ISSN: 2320-088X.IF: 6.199
- I. Lakshmi "A Survey on Revolution of Big Data Process Analytics". International Journal of Advanced Research (2016), Volume 4, Issue 6, June 2016, pg-1631-1639, ISSN: 2320-5407.IF: 0.26
- 8. **I. Lakshmi** "A Study on benefits and impact of Cloud Computing on 5G signal Processing"IJCSMC, Vol.5, Issue 6, 2016, pg-162-173, ISSN: 2320-088X.IF: 6.199
- 9. **I. Lakshmi** "A Review on Cloud computing in Mobile Applications" IJCSMC, Volume. 5, Issue 6, June 2016, pg-149-161, ISSN: 2320-088X. IF: 6.199
- 10. **I. Lakshmi** "Future role of information and communication technology (ICT) in higher education in everywhere throughout the world" IJCSMC, Volume 5, issue 6, June 2016, pg-414-421. IF: 6.199

- I. Lakshmi, M. Saravanan "An Academic performance on web browsing and mobile computing in recent years" IJCSMC, Volume 5, Issue 6, June 2016, pg-422-433, ISSN: 2320-088X. IF: 6.199
- I. Lakshmi "A Green Cloud-Oriented Computing Architecture for E-Learning Applications" International Research Journal of Advanced Engineering and Science (IRJAES) October 2016, Volume 1, Issue 4, pp. 74-81. Sci. Journal Impact Factor: 5.86
- I. Lakshmi "Smart City Community Green Computing with Cyber Security "IJCSMC, Volume. 5, Issue. 10, October 2016, Pg-53-60, ISSN: 2320-088X. IF: 6.199
- 14. I. Lakshmi "Green Data centers for Cloud assisted Mobile Ad hoc networks in 5G "IJETT, Volume 40, Number-3 and October 2016, pg-164-172, ISSN:2231-5381.IF:2.8
- 15. **I. Lakshmi** "Interfacing in body nano correspondence with form region networks: Tests and chances of the web for nano things" IJCSMC, Volume 5, Issue 12, December 2016, pg-182-196. IF: 6.199
- I. Lakshmi "Nanocore-A Study on 5G mobile communications" IJCSMC, Volume 5, Issue 12, December 2016, pg-173-181, ISSN: 2320-088X. IF: 6.199
- 17. **I. Lakshmi**, Navintha Nandakumar, "A comparative study of modern network concepts", IJCSMC, Vol. 6, Issue. 2, February 2017, pg.119 126. IF: 6.199
- 18. **I. Lakshmi**, Navintha Nandakumar" Emerging and Upcoming Threats in Cyber Security in 21 Century", IJCSMC, Vol. 6, Issue. 2, 2017, pg.119 126. IF: 6.199
- I. Lakshmi "Home and Industrial Automation with Real-Time Energy Metering & Monitoring using IoT based technology" International Journal for Scientific Research and Development (IJSRD) Vol. 5, Issue 04, June 2017 ISSN (online): 2321-0613 pg:2052-2057.IF:4.396
- I. Lakshmi, K. Priyadarshini "A Survey on Prediction of Diabetes Using Data Mining Technique "International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET) Vol. 6, Special Issue 11, September 2017, Pg-369-373.IF: 7.089
- 21. I. Lakshmi, Sarjanaa Subramanian" A Future, Scope, Vision and Challenges of Hacking in The Field of Cyber and Forensics in The 21st Century" International Journal of Recent Scientific Research Vol. 8, Issue, 10, pp. 20833-20839, October, 2017 Doi: 10.24327/Ijrsr ISSN: 0976-3031 IF: 7.383
- 22. I. Lakshmi, Sarjanaa Subramanian" A Recent Technique to Enhancing Cyber Security and Forensics: Ethical Hacking" International Journal of Recent Scientific Research Vol. 8, Issue, 10, pp. 20853-20857, Oct., 2017 Doi: 10.24327/ Ijrsr ISSN: 0976-3031 IF: 7.383
- 23. **I. Lakshmi** "Past Idea from the Internet of Computers to the Future Idea to Internet of Things" International Journal of Electronics & Communication (IIJEC), Volume 5, Issue 10, October 2017 Page no: 15-27. Impact Factor: 2.853
- 24. **I. Lakshmi**, "Smart Local Transport Tracking System using IoT based technique" IOSR Journal of Electronics and Communication Engineering (IOSR-JECE) e-ISSN:

2278-2834, p- ISSN: 2278-8735.Vol.12, Issue 6, Ver. I (Nov. - Dec. 2017), PP 12-15. IF: 3.12

- 25. I. Lakshmi, "A Review of Chemical effects of Nanoparticles to Human and Environment" IOSR Journal of Electrical and Electronics Engineering (IOSR-JEEE) e-ISSN: 2278-1676, p-ISSN: 2320-3331, Volume 12, Issue 6 Ver. I (Nov. Dec. 2017), PP 41-48.IF: 3.26
- 26. I. Lakshmi, "The Internet of Things (IoT) and furthermore cyber Security: Vulnerabilities, Threats, Intruders and Attacks" IOSR Journal of Computer Engineering (IOSR-JCE) e-ISSN: 2278-0661, p-ISSN: 2278-8727, Volume 19, Issue 6, Ver. I (Nov- Dec. 2017), PP 85-94.IF: 3.712
- I. Lakshmi, "A Critical Analysis of Knowledge Management in E-Learning" IOSR Journal of Computer Engineering (IOSR-JCE) e-ISSN: 2278-0661, p-ISSN: 2278-8727, Volume 19, Issue 6, Ver. I (Nov. - Dec. 2017), PP 78-84. IF: 3.712
- 28. **I. Lakshmi** "Enhancing E-Commerce Security with Digital Forensics and Curbing Cyber-Crime " Published in International Journal of Computer Science and Mobile Applications (IJCSMA), Vol.6 Issue. 1, January- 2018, pg. 67-75 ISSN: 2321-8363 Impact Factor: 5.515.
- 29. **I. Lakshmi** " A Method Dynamic Kinematics in Detecting Objects and Humans for the Visually Impaired and Disabled People" Published in International Journal of Scientific Research in Computer Science, Engineering and Information Technology (IJSRCSEIT) Volume 3 Issue 1 | Jan-Feb 2018, ISSN: 2456-3307,471-476. IF: 4.032
- 30. I. Lakshmi "Prototype Design and Development in Assistive Mobility Solution for the Visually Impaired using IOT " Published in International Journal of Scientific Research in Computer Science, Engineering and Information Technology (IJSRCSEIT) Volume 3 Issue 1 | Jan-Feb 2018, ISSN: 2456-3307, 477-479 IF: 4.032
- 31. I. Lakshmi "A Vision, Architectural Elements, and Future direction of Internet of Things (IoT) " Published in International Journal of Scientific Research in Computer Science, Engineering and Information Technology (IJSRCSEIT) Volume 3 Issue 1 Jan-Feb 2018, ISSN: 2456-3307, pg. No: 306-329 IF: 4.032
- 32. I. Lakshmi "An investigation of Face Matching and Retrieval in Cyber Forensics Applications " Published in International Journal of Scientific Research in Computer Science, Engineering and Information Technology (IJSRCSEIT) Volume 3 Issue 1 Jan-Feb 2018, ISSN: 2456-3307, pg. No: 419-427. IF: 4.032
- 33. I.Lakshmi "Performance Analysis of fingerprint Privacy Protection Using Sparsh Method" THINK INDIA JOURNAL ISSN:0971-1260 Vol-22- Issue-14-December-2019 14959-14964
- I.Lakshmi, S. Soundharya "Blended Learning versus Traditional Learning in Indian schools –A Comparative study" International Journal of Future Generation Communication and Networking Vol. 12, No. 5, (2019), pp. 267- 274 ISSN: 2233-7857 IJFGCN 267 IF: 0.40.
- 35. **I.Lakshmi** "Smart Bus Alert System for Easy Navigation of Blind" Test Engineering and Management Volume 82 Page Number: 12574 – 12580 Publication Issue: January-February 2020.

- 36. K. Iyakutti, V.J.Surya, I. Lakshmi ,R. Rajeswarapalanichamy,Y. Kawazoe" Nonregular hexagonal 2D carbon, an allotrope of graphene: a first-principles computational study" Journal of Molecular Modeling, 26,150 (2020) https://doi.org/10.1007/s00894-020-04412-6,
- Iyakutti K, Kawazoe Y; Lakshmi I; Rajeswarapalanichamy R; Surya V" 18 and 12 member carbon rings (cyclo[n]carbons) - A Computational design" Journal of Material Science and Engineering-B-<u>Vol.263</u>, (2021), 114895
- 38. K. Iyakutti, V.J.Surya, **I.Lakshmi**, R. Rajeswarapalanichamy, Y.Kawazoe "Exotic properties of materials and the necessity to invoke the dimension of angle (θ) and the orbital degrees of freedom of s electrons" International Journal of Computational Materials Science and Engineering Vol. 09, No. 01, 2050003 (2020), DOI: 10.1142/S2047684120500037

Participation in seminar/workshop/conference/symposium:

- Participated in "Machine Learning Using Python- Online Faculty Development Program "hosted by the Department of Computer Science, School of Computing Sciences, Vels Institute of Science, Technology and Advanced Studies, Chennai-600117 on 4.5.2020.
- Participated in the online Faculty Development Program on "Artificial Intelligence & Its Applications" dated 14-05-2020, Organized by Department of Computer Science, VISTAS, and Chennai
- Session on "Current trends in IT" organized by SMC 2016.
- Seminar on 3D animation, visual effects and game design was organized on 15th Feb 2016 by Mr. Mike Rayes, faculty of Vancouver Film School, British Columbia, Canada.
- Training Programme on TKT (teacher knowledge test- module "conducted by Cambridge University in SMC 2016.
- Seminar Hands on training on MAT lab conducted by ENTHU Technologies 2016
- Seminar on "Teacher as effective leaders" organized by SMC 2016
- Seminar on "Beyond teaching-Role of facilitator", organized by SMC 2016
- Session on " Cloud computing" organized by SMC 2016
- National workshop Hands on training on soft computing using MAT lab conducted by MIET Chrome pet 2015.
- Video conference on "Search Engine Optimization" organized by SMC 2015
- Seminar on "Cloud computing" by CTS 2015
- Workshop on "Cloud computing" by Cloud Bull INDIA 2015
- State Level Symposium on Applications of MATLAB in Computer Science 27 & 28 February, 2014
- Seminar on Software Testing was conducted by SMC 2013.
- Session on practical implementation of SDLC conducted on 12th Dec, 2013
- Workshop on "Mobile Application" August-Sept 2013 in Stella Maris College Chennai.
- Video Conferencing on "Networks" by SMC 2013.

- National Conference on "Information and Communication Technology" (NCICT April 2010), Bangalore
- National Workshop on "Business Intelligence: Applications & Practices" held on September 2010
- Seminar on "Computer and the Human Experience" February 2009 Bangalore
- International Conference on "Emerging trends in higher education A global perspective concerns and challenges in environmental sustainability Entrepreneurship and cinema (ICEEC)" August 2008 Bangalore.
- FAFEA Alumni National level workshop held on January 2008 in Jyoti Nivas College Bangalore.

Other Activities

- As Reviewer in the journal IJCSMC.
- As Reviewer in the journal IJECS.
- As Reviewer in the journal of IJCTT.
- As Editor in the journal of IJETRM.
- As Member of the International Association of Engineers.
- As Member of Seventh Sense Research Group (SSRG).
- As Regional Editor in Chief in IJATTMAS
- As Reviewer in the journal IJAETMAS.
- As Reviewer in the journal IJCSC.
- As Member of the Wor,ld Academy of Science, Engineering and Technology.
- College Software Maintenance: Attendance Package, Admission Package, Fees Package in Jyoti Nivas College June 2006- May 2013

University Activities:

- Examiner in the Post Graduate degree of University of Madras.
- Question paper setter for Sri Krishna Arts and science college, Coimbatore.
- Question paper setter for Theivanai Ammal College for Women, Chennai.
- Question paper setter for Women Christian College for Women, Chennai

Departmental Activities:

- > Coordinator of Links Club during 2016-2017.
- ➤ Coordinator of Farewell during 2016-2017.
- > Coordinator of Fresher Party during 2016-2017.
- ➢ Coordinator of Fare well during 2014-2015.
- ➤ Coordinator of Fresher party during 2014-2015.
- > Coordinator of Fresher party during 2015-2016.
- Coordinator of Farewell during 2015-2016.

Refresher /Orientation orientation Courses:

Faculty Development Program on **"Trends in computing"** in Bharathidasan University on Dec 2008.

Certificate course in DTP, TALLY.

BCA:

2019

- Soil Evaluation and Conservation in IOT → Iffat Humaira, M.Praveena
- Automatic Class Room Controlling System in IOT→ I.Shalini, R. Josephine Dedica, D.Steffi Grace
- THROUGH-IT → N.Harshini Nikitha.M ,B.Swetha
- A Comparative Study of Blended Learning versus Traditional Learning in Indian
- Schools→Soundharya S

2018

• Contingency Assversion and Tracking System for Night Drivers Utilizing IoT Predicated System → M. Lokeshwari, S. Sarjanaa,

- An Accident Obstacle Avoiding Robot Using IOT → S. Sarjanaa
- Vehicle screening framework utilizing GPS built IOT framework → M. Lokeshwari
- Restaurant management System

2017

- Hotel Management System VB Net → A.Sheeba
- Human Resources Management System VB Net → M.chitra
- Inventory System VB Net→S.Bindhu
- Membership Management System VB Net →M.Hema

2016

- Patient Care System VB Net→S.Anusha
- Send SMS To Cell Phone Through SMTP Mail VB Net→S.Sumi
- Trainee Management System VB Net→A.Agila
- Online gas booking management system VB NET→S.Mary
- Payroll management system VB NET→S.Mercy

2015

- Stock Management System VB Net.
- Data Encryption System VB Net.
- HR Management System VB Net.
- Blood donation camp system VB Net.
- Online car rental system VB Net.

2014

- Leave application management system VB Net
- Bus Management System VB Net.
- Complaint management system VB Net.
- Courier management system VB Net.
- Online Food Ordering System VB Net

2013

- Online Shopping Project in PHP
- Online Vehicle Registration System Project VB Net
- Online bid management system in PHP
- Movie Ticket Booking System VB Net

M.Sc. (Information Technology):

2019

- Early Predictive Analysis of Diabetes Using Data Mining Techniques → B.Bhargavi
- Literature Study on Big Data Analytics in Transportation → M.Regina, A.Apoorva
- Application Of Women's Security And Safety Based On Iot System → Vidhya Lakshmi
- K Freeda Jaya Pauline E
- Predictive Analysis on Crime Investigation in India using Classification Techniques → S.Roja

2018

- Indian Sewers Risking Their Lives → M Kavitha
- GPS Location based Android profile mode changer \rightarrow B. Gowthame
- Survey on Analysis of Water Scarcity in Chennai, India A cross sectional study→ Celestina W
- Smart Railway Gate Control→Maria Viji
- A Study On Stress Factors And Management Strategies Among Employees In It Sector → K. Yogalakshmi

2017

- Predictive analysis of diabetes using Bayesian network and naive Bayes techniques → Priyadarshini.
- Online Examination System VB Net→Ambica Manohar
- Time Table Generator VB Net → M.Bhavani
- College management system VB Net → M.Rani
- Gate pass management system VB Net → M.madhu
- Bookstore management system VB Net → A.Antia

2015

- Online exam management system VB Net→S.Mala
- Clinic management System VB Net→S.Sheela
- Car share management system VB Net → M.Meena
- Medicine inventory management system VB Net →A.Arra
- Online gallery art system VB Net → A.Amritha

2014

- Student management system VB Net
- Online property management system VB Net
- Restaurant billing system VB Net
- Prison management system VB Net
- Matrimonial management system VB Net

M.Phil Dissertation (Co guide):

- 1. Analysis of Unit Testing A Case Study
- 2. Building a User Interface Test Automation Framework
- 3. Measurement of Object Oriented Software Development Process
- 4. Analysis of web server and browser using time based and effort based model
- 5. Query Optimization in Distributed Databases through Load Balancing

- 6. Network Intrusion Detection Techniques for Single Source and Coordinated Scans
- 7. Digital Water marking using wavelet Transform
- 8. Component based testing a framework
- 9. Analysis on Type qualifier to improve the quality of the software
- 10. Web Cat An automation tool for testing
- 11. Comparison of various Software testing
- 12. Web services in GIS Application.
- 13. Web search in trust based Application.

Declaration:

I pledge and pronounce that all the above stated information is true to the best of my knowledge.

Dr. I.LAKSHMI