

# **R.L. JALAPPA INSTITUTE OF TECHNOLOGY**

(Approved by AICTE, New Delhi and Affiliated to VTU, Belagavi) Doddaballapur-561203, Bengaluru Rural District, Karnataka, India. email: principal@rljit.in | website: www.rljit.in | Phone: 080 27626800



## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

| Faculty Name      | Lavanya Vaishnavi DA   |   |
|-------------------|--|---|
| Designation       | Assistant Professor  |   |
| Area of Interest  | Wireless Communication,<br>VLSI design, Verilog and HDL<br>Coding, Machine Learning, and<br>Python coding  | 6 |
| Email ID          | lavanyavaishnavida@rljit.in<br>lavanyavaishnavi@gmail.com  |   |
| Research Identity | Orcid Id:<br>0000-0001-9303-7619<br>Scopus Id: 58763358100<br>Google Scholar Id:<br>https://scholar.google.com/citations?hl=en<br>&user=lbBTg5gAAAJ<br>Research gate Id:<br>https://www.researchgate.net/profile/Lava<br>nya-Vaishnavi-Da<br>Vidwan Id: 353014 |   |

# Resume

## **EDUCATION:**

Currently enrolled for PhD under the guidance of Dr. Anil Kumar C, In the research and Development centre of R L Jalappa Institute of Technology.

I completed my Master of Technology in Reva Institute of Management in the emerging field of VLSI and embedded systems. I secured about 80% in my studies.

I completed my Bachelor of Engineering in RL Jalappa Institute of Technology, in Electronics and Communication Engineering with score of 72%.

I completed my schooling in Swami Vivekananda English High School in Doddaballapur.

## **TECHNICAL SKILLS:**

I have completed Udemy courses in Python, 5G communication and basics of communication systems, and OpenCV using Python.

I'm well trained in Cadence tool, analog design and digital design in Multisim,.

On my interest, I have learned the basics of LabVIEW.

PSpice, MATLAB Simulink and Xilinx are also my area of Interest.

#### **PROFESSIONAL WORK EXPERIENCE:**

Started my teaching career on 1<sup>st</sup> of February 2010, as lecturer in the esteemed institution of RL Jalappa Institute of Technology. I was promoted as Assistant Professor on 1<sup>st</sup> of December 2015.

**PUBLICATIONS:** JOURNAL

Anil Kumar C., Lakshmi Shrinivasan, Anil Kumar R., Harish S., **Lavanya Vaishnavi D. A.**, "Intelligent Monitoring of Grey Oyster Mushroom Cultivation With IOT", International Journal of Intelligent Systems and Applications in Engineering, November, 2023, 12(4s), ISSN (Online): 2147-6799, Page: 235–239.

Harish S., Reshma Verma, G. K. Venkatesh, **Lavanya Vaishnavi D.** A., Anil Kumar C., "Intelligent Filtering Techniques for Reducing Various Noise in Image of Mango Leaves.", International Journal of Intelligent Systems and Applications in Engineering, November, 2023, 12(4s), ISSN (Online): 2147-6799, Page: 367-374.

Anil Kumar C., Dr. Poornima G. R., Aruna R., Pradeep Kumar B. P., Harish S., **Lavanaya Vaishnavi D. A**., "Implementation of an Efficient and Reconfigurable Architecture for DCT on FPGA", International Journal of Intelligent Systems and Applications in Engineering, December, 2023, 12(10s), ISSN (Online): 2147-6799, Page: 597–604.

**Lavanya Vaishnavi DA** and Anil Kumar C, "Various insights of Wireless Communication", International Journal of advance researcher in science, communication and technology, Volume 3, Issue 2, August 2023, ISSN (Online) 2581-9429, DOI: 10.48175/IJARSCT-12729, Page 191-199

Anil Kumar C, Chethan Venkatesh, **Lavanya Vaishnavi D A**, Harish S, "Computer vision based Hand gesture recognition system", Neuro Quantology, Jul 2022, Volume 20, Issue 7, Page 2859-2866, DOI: 10.14704/nq.2022.20.7.NQ33365

Lavanya Vaishnavi D A, Anil Kumar C, Harish S, Divya M L, "MediaPipe to Recognise the Hand Gestures", WSEAS TRANSACTIONS on SIGNAL PROCESSING Volume 18, 2022, DOI: 10.37394/232014.2022.18.19

Anil Kumar C, **Lavanya Vaishnavi D A**, "Renesas Based Smart ROBOT using Embedded System". International Journal of Research in Science, Commerce, Arts, Management and Technology, Volume 2, Issue 1, February 2021. (DOI: 10.48175/IJRSCAMT-101),

Anil Kumar C., Pradeep Kumar B.P, Venu K N, **Lavanya Vaishnavi D.A.**, "Intra Prediction Algorithm for Video Frames of H.264", 2021, Natural Volatiles and essential oils journal, Page 51-58, Volume: 8 Issue: 5.

Anil Kumar C, Lavanya Vaishnavi D A, "Renesas Based Smart ROBOT using Embedded Page 2 of 7 System", International Journal of Research in Science, Commerce, Arts, Management and Technology, Volume 2, Issue 1, February 2021, ISSN (Online) 2582-8045

## **NATIONAL CONFERENCE:**

Presented a paper in titled, "Enhancing the Security of Information using BPCS", add the International Conference on Communication and Computing bargained by the Society of Information Processing, Bengaluru and Alpha College of Engineering, Bengaluru in the year 2015.

Presented paper, "design and implementation of colour Conversion Module RGB to Y, CB, CR and vice versa" with paper ID. NAREC-SP-56 in 2 day "National Conference on Advanced Research in Electronics and Communication Engineering 2014" Organised by RL Jalappa Institute of Technology.

Presented paper entitled, "an FPGA chip identification generator using configurable ring Oscillator." In national conference of E Innovations 2013 organised by Department of Electronics and Communication Engineering, Sridevi Institute of Engineering and Technology, Tumkur in the year 2013.

Presented paper "improvement of frequency stability for ring oscillator" in 9<sup>th</sup> national Women's Science Congress organized in RL Jalappa Institute of Technology in association with Women Signs Congress, on 6<sup>th</sup> and 7<sup>th</sup> November of 2016.

Presented a paper on a cryptographic algorithm based on linear feedback shift register in a national conference on emerging Trends in electronics and Communication Engineering held on 22<sup>nd</sup> of April 2016, organized by Department of Electronics and Communication Engineering in association with IETE, Bengaluru.

#### **TEXT BOOK AUTHORED:**

**Fundamentals of Digital Circuit and Design**, Year: 2022, ISBN: 978-93-5625-147-2, Scientific International Publishing House

Fundamentals of IoT, Year: 2023, ISBN: 978-93-5757-137-1, Scientific International Publishing House

**Fundamentals of IoT and Image Processing**, Year: 2023, ISBN: 978-93-5757-459-4, Scientific International Publishing House

## PATENTS:

"Energy Efficient Wireless Communication for IoT Enabled Greenhouses", Application Number-202341011188, Application Ref Number-202341011188, Filing Date-18/02/2023 -Indian Patent Office

Data Processing Equipment, International Design Classification: Version: 14-2023 Class: 14 Recording, Telecommunication or Data Processing Equipment Subclass: 02 Data Processing Equipment As Well As Peripheral Apparatus And Devices, Certificate of Registration for a UK Design, Design number: 6316837, Grant date: 13 October 2023, Registration date: 04 October 2023

#### **FUNDED PROJECTS:**

"Maze Solver Robot", funded by KSCST in the year 2020.

#### **INVITED TALKS:**

- Gave one day lecture on introduction to VHDL programming held on 19<sup>th</sup> one, 2022 for Department of Computer Science and Engineering of SJC Institute of Technology, CHICKBALLAPUR.
- Gave an expert talk on "VLSI design" organized by IEEE Bangalore section on 26<sup>th</sup> of May 2020.

#### FDP/WORKSHOP ATTENDED:

- Attended one-week Faculty development programme on Universal human values from 11<sup>th</sup> of September. 2023 to 15<sup>th</sup> of September. 2023 organised by HKBK College of engineering.
- Attend at one week online teachers training programme on analogue. Vlsi design using EDA tool, Conducted from 20<sup>th</sup> March 2023 to 25<sup>th</sup> of March. 2023, Organised by AICTE-VTU joint teachers training programme.
- Attended introduction to python programming and its application conducted by AICTUVTU. Joint teachers training programme, One week online teachers training programme conducted on 13<sup>th</sup> to 17<sup>th</sup> march. 2023.
- Attend at an online webinar on workshop on prototype processing design and development prototyping in electronic product conducted by Department of electrical and electronics engineering and information science engineering of Oxford College of engineering on 10<sup>th</sup> of May. 2022.
- Attended one day webinar on quantum.cellularautomata in nanotechnology organized by Brindavan College of engineering on 30 June 2020.
- Attended 22nd ISTE state Level faculty convention organized by SJC Institute of Technology on 4th of February 2020.
- Attended one week hands on faculty development programme on "Labview for engineering applications" organized by Nagarjuna College of Engineering and Technology during 6<sup>th</sup> to 10<sup>th</sup> of January 2020.
- Attended "experience learning on electronic devices and digital system design" organized by Department of Electronics and Communication Engineering of Sjb Institute of Technology. During the 15<sup>th</sup> to 17<sup>th</sup> of July 2019.
- Attended "analogue and digital IC design using cadence tool" organized by Department of Electronics and Communication Engineering, Nagarjuna College of Engineering and Technology in association with N Tuple Technologies Pvt Lmtd on 12<sup>th</sup> of March to 14<sup>th</sup> of

March 2019.

- Attended "Matlab Primer" held on RL Jalappa Institute of Technology on 10<sup>th</sup> and 11<sup>th</sup> of March 2016.
- Attended hands on "workshop on VLSI design using Cadence tool suite", Organised buy Sambhram Institute of Technology on 28<sup>th</sup> to 30<sup>th</sup> of July 2010.
- Attended advances in "wireless communication and networks" on 30<sup>th</sup> April 2010 organised by Department of Electronics and Communication Engineering in RL Jalappa Institute of Technology.
- Attended 5 days faculty development programme on "programming ARM processor with hands on using ESA keil Arm Cortex M3 Evolution board", organized buy BMS Institute of Technology and Management in association with Electro systems associate. From 11<sup>th</sup> to 15<sup>th</sup> of December 2017.
- Participated in a seminar on :"intellectual property rights and patent awareness programme" organized in association with Karnataka State Council for Science and Technology in Reva Institute of Technology and Management on 15th of December 2012.

#### CONFERENCE/FDP/WORKSHOP CONDUCTED:

- Worked as a Convener for One Week MDP Certification Course, conducted from 24/07/2023 to 28/07/2023, "Laboratory Administrative skills & Work Etiquettes", for Technical Faculties.
- Worked as a coordinator for the International Conference conducted in 28<sup>th</sup> of August -2023.
- Conducted a 5-day student Certification Course on "RF and Antenna Opportunities in Communication System" from 31/07/2023 to 4/08/2023 for the 4<sup>th</sup> semester students of Electronics and Communication Department.
- Worked as a coordinator for international conference on recent trends in Mechatronics, Electronics, and cloud computing, held on December 22<sup>nd</sup> and 23<sup>rd</sup> of 2016, organized by RL Jalappa Institute of Technology.
- Work as a coordinator for international conference on researchers advances in integrated navigation system at RL Jalappa Institute of Technology, Bengaluru on May 6<sup>th</sup>, 2016.
- Work as a coordinator for international conference on Advances in human machine interaction organized by a RL Developer Institute of Technology on 3<sup>rd</sup> to 5<sup>th</sup> of May 2016
- Work as a coordinator for international Conference on Computing, modelling and security organized by RL Jalappa Institute of Technology on February 11<sup>th</sup> to February 13<sup>th</sup> of 2016.
- Worked as a coordinator for international conference or computer science and information technology held by Department of Information Science and Engineering in RL Jalappa Institute of Technology on 17<sup>th</sup> and 18<sup>th</sup> of September 2010.

- Contributed towards setting university question paper for Visvesvaraya Technological university and autonomous Colleges.
- Evaluating the performance of students as an external lab examiner in affiliated VTU colleges, autonomous VTU colleges and in universities.

#### **OTHER RESPONSIBILITES:**

#### COLLEGE LEVEL:

- NAAC Criterion 6 head
- NIRF Coordinator
- IIRF Coordinator
- Alumni coordinator.
- Editorial member of SMRUTHI for 5 continuous years.
- Work for SANTHASA, a cultural fest of college.
- Coordinated X-ibit, a technical event organized in the college.
- Hosted many college level Event.
- Organized a different other college level events.
- Committee member for International Conference

#### DEPARTMENT LEVEL:

- e-Suddi coordinator form the Department
- CIE coordinator
- Local guardian Coordinator
- Time Table Coordinator
- Alumni Representative

## **PROFESSIONAL MEMBERSHIPS:**

Life member of IETE. Life member of Institute of Researchers. All India Council For Technical Skill Development Education Research and Development Association (ERDA)

#### HONORS/AWARDS:

Young Researcher Award by Institute of Researchers in the year 2021 Distinguished Professor Award in the year 2021 by Institute of Researchers.

## OTHER SIGNIFICANT ACHIEVEMENTS (if any):

Gate qualified in the year 2023 with a valid GATE score of 358, and All India ranking of the paper as 6951.

Served as Revier for Different Conferences.

## CONTACT DETAILS:

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## Lavanya Vaishnavi D A