

Dr.KENDAGANNA SWAMY S
Email: kendagannaswamys@rvce.edu.in

Phone: +91-9980672756

OBJECTIVE

- To professionalize my career in a well-established firm and to improve myself constantly by viewing every day as a new experience, focus on the institution interest to the maximum best as possible. Willing to work as a key player in challenging, innovative and creative environment.

SUMMARY

- **12.5** years of experience in Teaching field as Assistant Professor at RVCE Bengaluru.
- Established Centre of Excellence on Sensor Technology and its applications (**CSTA**).
- **Product development:**
 1. Sensors application development kits
 2. IoT applications Development Kits
 3. Automatic sanitizer dispenser during COVID- 19.
- **Product development** revenue generated as on October 2023 is **9.6 Lakh**.
- **Project execution consultancy** revenue generated as on October 2023 is **10.72 Lakh**.
- Completed six months of the IUCEE International Engineering Education Certificate Program (IIEECP)-2022 under the Indo Universal Collaboration for Engineering Education from Feb 2022- Aug 2022.
- Conducted **series of one month industry certified internship** programs for engineering students under CSTA. Revenue generated as on October 2023 is **7.69 Lakh**.
- **Teaching Learning Award** from IUCEE-ICTIEE – 2024.
- **Best Young Teacher Award** in the year of 2019 under ISTE-RVCE Chapter.
- **2.0** years of experience in **Software industry** mobile application testing.
- **6** months of experience in semiconductor domain as an Intern in layout design.
- Two national level **patent granted and** one national level **patent applied**.
- There are **37 International Journal and conference publications**.
- **30 workshops conducted** for engineering faculties on **blended learning using ICT tools**.
- **9 workshops conducted on IoT based Sensors and its applications Development**.
- **Established SKILL lab** at EIE department,RVCE.
- **BoE and BoS member under VTU colleges**.
- **Youtube Channel created** for Digital logic design course and it reached 87k views.
- **Around 5.0** years of research experience in the area of **Network on Chip (NoC)**

- Worked as a team member in **SISO (Samsung Electronics India Software Operations) Mobile Browser Testing** based on Webkit 3.2 and OMA.
- Experience in **Manual testing**.
- Strong hands-on experience on **mobile handset testing** and evaluation of mobile software for **GSM & 3G Phones**.

EXPERIENCE

- Currently working in **RV College** of Engineering as **Assistant Professor** from Aug 2011 to till date.
- Worked as an **Intern** in **LSI Pvt Ltd** Bangalore with Layout Design Team from Feb 2011 to Aug 2011.
- Worked as **Software Test Engineer** in **Integra micro systems**, Bangalore from May 2010 to Feb 2011.
- Worked as a **Software Test Engineer** at **Sonim Technologies (IDC)**, Bangalore from September 2007 to September 2008.
- Successfully completed one year of apprenticeship training in **B.E.L Ltd**, Bangalore.

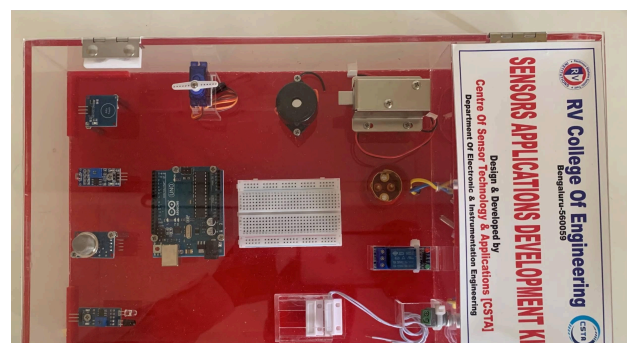
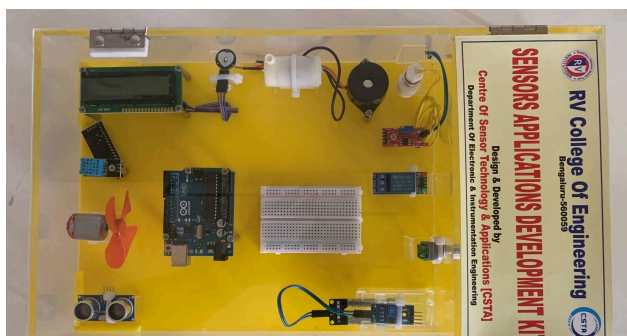
ABOUT CENTER OF EXCELLENCE:

On September 6, 2022, I launched the Centre of Excellence in Sensor Technology Application (CSTA). Under this centre, we are doing many activities such as Internship programme on sensors for engineering students, Workshops & seminars, National/International conferences, sensor fabrication & its characterization, sensor based product development, Industry consultancy work, R&D related to sensor fabrication and its application development, Writing research articles for reputed journals and conferences.

Activities completed:

Product Development under CSTA:

1. Design & Developed sensors and its applications kit for RVCE, IDEA Lab which comes under mechanical department, and we got **5.8 lakh (120 Kits)**.
2. Design & Developed **IoT based** sensors and its applications kit using for RVCE, IDEA Lab which comes under mechanical department, and we got **3.15lakh (15 Kits)**.



3. Design and developed an **IoT kit** for RVITM worth of 60k (**20 kits**).



4. Designed and Developed Touch Free Hand Sanitizer Dispenser during COVID – 19. Funded by RSST, Bengaluru. Funded Amount: **Rs.69,000/-**. I have developed 50 pieces for our institution.



Internship program under CSTA

I have trained 223 engineering students from various engineering colleges from Karnataka with fee of Rs.3455 per student and revenue generated **Rs 7.70 Lakh** through this internship training program.

Consultancy Work under CSTA

1. Under CSTA, we have executed WIRIN project work and received a consultancy worth **Rs. 10 Lakh**. In that we have executed three projects for autonomous vehicle such as TPMS (Tyre pressure monitoring System), Smart Breaking system in electrical vehicle and real time battery temperature monitoring system.
2. Industry project execution (Samsung) - IoT | Energy Saving using People Activity & Count obtained using Computer Vision along with students. Received **Rs.72000/-** cash for project execution from SAMSUNG company.

Workshops conducted Under CSTA:

1. Conducted Five days training program on Sensors based IoT applications under International Certificate Course on Smart Manufacturing, from February 22nd to 26th, 2024.
2. Conducted Three days' workshop on sensors and their application development for second-year UG students of BIT, Bengaluru, from November 27th to 29th, 2023.
3. Conducted a one-month certified training programme for IDEAL lab handling RVCE faculties, July–August 2023.
4. Conducted Two days' workshop on Sensors and its applications development for second year UG students of ISE, RVCE, from 27th to 28th July 2023.
5. Conducted Two days' workshop on Sensors and its applications development for PG mechanical PDM and SIM students from 22th to 23th April 2023.
6. Conducted Two days' FDP on Sensors and its applications development using IoT for RVITM Faculties from 3rd and 4th December 2022.
7. Conducted Three days' workshop on Sensors and its applications development for PG mechanical SIM students from 18th to 20th August 2022.
8. Conducted Three days' workshop on Sensors and its applications development for PG mechanical PDM students from 18th to 20th July 2022.
9. Conducted one day workshop on sensors and its applications using IoT for Dept of BCA, National college, Jayanagar, Bengaluru on 26th May 2022.
10. Delivered a talk on "Sensors and its Applications" organized in Student Development Program conducted by the Department of Electronics and Communication Engineering, JSSATE, Bengaluru, from 29th to 31st January 2022, through Google Meet platform.

TEACHING LEARNING ACTIVITIES

Faculty Development Program conducted (FDP) on TLC:

Sl. No.	Particulars	Venue	Date	No of Participants

1.	Conducted a three-day FDP on "ICT tools for engineering education."	DSCE, Bengaluru	17 th -18 th November 2023	35
2.	Conducted a two-day FDP on "TLP in Engineering Education".	RRCE,Bengaluru	17 th -18 th November 2023	40
3.	Conducted one day workshop on "TLP in Engineering Education".	RVITM Bengaluru	27 th September 2023	37
4.	Delivered a talk on "TLP in Engineering Education".	RVCE, Bengaluru	25 th August 2023	25
5.	Conducted Three days FDP on "ICT tools for higher education".	New Horizon Engineering College	19th to 21st September 2022	52
6.	Conducted Three days FDP to develop a Skill based lab for First year students.	RVITM Bengaluru	25 th to 27 th April 2022	25
7.	Delivered Two days technical talk in Five-day Online FDP on "ICT Tools for Effective Teaching & Learning Process".	RVITM Bengaluru	28 th and 29 th March 2022	102
8.	Conducted Two days FDP on "Metacognitive Hybrid Learning Model to enhance teaching learning processes using ICT tools".	SKIT Bengaluru	2 nd and 3 rd March 2022	45
9.	Conducted two days FDP on "Metacognitive Hybrid Learning Model to enhance teaching learning processes using ICT tools".	SKIT Bengaluru	22 nd and 23 rd December 2021	52
10.	Resource person for Two days – 'One Week Faculty Development Programme Under AICTE Margdarshan (Share and Mentor Institutions) on Outcome Based Education'.	Dr. AIT, Bengaluru	17th to 18th December 2021	60
11.	Conducted Three days workshop on "Effective Teaching Learning Pedagogies and Advanced ICT Tools".	BIT, Bengaluru	7 th to 9 th October 2021	65
12.	Conducted workshop on "Advanced ICT tools for higher education".	CEDLR, RVCE	13 th to 17 th September 2021	19
13.	Conducted One day workshop on "ICT tools for engineering mathematics".	Mathematics dept, RVCE	23 rd January 2020	12

14.	Conducted Two days workshop on “Metacognitive Hybrid Learning Model using ICT Tools for OBE”.	GMIT, Davangere	21 st and 22 nd January 2020	104
15.	Delivered a Talk on Webinar Series: “Metacognitive Hybrid Learning Model using ICT tools”	IUCEE-RVCE	1 st November, 2019	45
16.	Delivered a Talk on “Road Safety” at RVITM in association with First Year induction program.	RVITM, Bengaluru	22 nd August 2019	10
17.	Delivered a Talk on “Smart board-based engineering courses lecture delivery”, at Electronics and Instrumentation Department.	EIE Dept, RVCE	16 th August 2019	8
18.	Delivered Two days talk on “ICT based engineering courses design”.	RVITM, Bengaluru	25 th and 26 th July 2019	12
19.	Delivered One day talk on “Metacognitive teaching learning process using ICT tools” for faculties.	Government Engineering College, Ramanagara	14 th December 2018	39
20.	Delivered One day talk on “Metacognitive teaching learning process using ICT tools” for Faculty	Sri Sai Ram College of engineering	10 th October 2018	63
21.	Delivered One day talk on “Metacognitive teaching learning process using ICT tools”, for Faculty.	AMCEC, Bengaluru	15 th September 2018	57
22.	Delivered a talk on “ICT based engineering course material and lab experiments design”	RVCE mechanical department	27 th April 2018	23
23.	Conducted One day hands on training on “ICT Tools” to E&IE department and Electrical department.	ISE seminar hall, RVCE	9 th February 2018	37
24.	Conducted Two days hands on training and talk RVCE Information Science department on “ICT Tools”	ISE seminar hall, RVCE	21 st December 2017	15
25.	Delivered a Talk on “Digital learning”, using e-Learning Tools in Six days workshop on Pedagogy	SJCE Mysore	2 nd August 2017	46
26.	Delivered a Talk on “Innovative teaching using e-Learning”.	NIE Mysore	13 th July 2017	57
27.	Delivered a Talk on “Innovative teaching using e-Learning”.	SSMRV Jayanagar	19 th May 2017	67

28.	Delivered a talk on “Digital learning”, during Six days workshop on Pedagogy	SSIT Tumkur	11 th November 2016	55
29.	Conducted Two days workshop on “Innovative teaching using e-Learning tools”.	JNNCE Shivmoga	19 th and 20 th August 2016	44
30.	Delivered a Talk on “Blended learning” during Six days workshop on Pedagogy for Non teaching staff.	CSE, RVCE	4 th to 9 th July 2016	39

International Certification course on TLP

I had completed six months of the IUCEE International Engineering Education Certificate Program (IIEECP)-2022 under the Indo Universal Collaboration for Engineering Education from Feb 2022- Aug 2022.

Youtube Channels :

1.Digital Logic Design Course

<https://www.youtube.com/watch?v=7yeH7eK mz3k&list=PLt39B1hMCiCRVsECYdxsZzepPGDFIP5Ev>

2. 8051 Microcontroller Course

<https://www.youtube.com/@supperswamy7/videos>

3. Digital IC trainer KIT Explanation

<https://www.youtube.com/watch?v=M6H49R87lyY&t=195s>

Learning Management System using Google Cites

1.VLSI deisgn Course

<https://sites.google.com/rvce.edu.in/vlsi/lecture-videos>

2. RTOS Course

<https://sites.google.com/rvce.edu.in/rtos/about-faculty>

AWARDS:

1. I have received Teaching Learning Award from IUCEE-ICTIEE – 2024.
2. I have received the Best Young Teacher Award from ISTE RVCE Chapter 2019.

ENGINEERING COURSES HANDLED:

Digital Electronics	8086 Microprocessor
Embedded System Design	ASIC Design
Real Time operating System	VLSI Design
Advanced Computer Architecture	Low Power VLSI Design
ARM Processor	Power Electronics
System on Chip	Design Thinking
8051 Microcontroller	Management and Organization Behaviour

Department Level SKILL lab setup:

1. I am part of the department and institution-level skill lab to transfer knowledge on PCB design and power supply design for 4th semester students from 12th June to 17th June 2023.
2. I am part of the department and institution-level skill lab to transfer knowledge on home appliance installation and uninstallation for Electrical Science branches like EEE, ET, ECE, and EI students from June 25, 2022, to July 6, 2022.
3. College level IDEA Lab setup and Manual prepared and submitted to Mechanical department on 25th March 2023.

ACADEMIC QUALIFICATION

- **Ph.D** (VLSI design) from Visvesvaraya Technological University, Belagavi.
- **M.Tech** (VLSI Design & Embedded Systems) from P.E.S College of Engineering, Mandya with a CGPA of 7.92.
- **B.E** (Instrumentation Technology) from KNSIT, Bangalore with an aggregate of 75.01%.
- **Diploma** (Electronics & Communication Engg) from J.S.S Polytechnic Nanjagud, Mysore with an aggregate of 70.05% .
- Diploma in **Computer Hardware and Networking** from Jetking, Mysore.
- Diploma in VLSI Physical Design (ASIC Backend)

SKILL SET

Languages : C, PERL, ASSEMBLY LANGUAGE and HDL code.

ICT Tools : Google sites, EdTed, Mailmerge, flobero ,geopardylab, Mentimeter, Edpuzzle, Flipgrid, Google Classroom, Kahoot, Plickers, Quizlet, Socrative,

Hardware : Arduino, Raspberry Pi, Node MCU, Analog and Digital sensors.

Operating System : Linux, Unix, Windows

VLSI Tools : Virtusu, NC launch and Xilinx ISE (Fullcustom design Flow)

Others : HTML , CSS

ACADEMIC ACHEIVEMENTS

Patents:

SL.NO	PATENT TITLE	TYPE	APP.REF NUMBER	DATE
1.	Gesture Recognition System and Device with Sign Language Translation	National	201641010977	Published:30.03.2016 Granted:23-05-2022
2.	Smart belt for school children	National	367711-001	Published:15.07.2022 Granted:19-08-2023
3.	A Method Of Synthesis Of Polymer Nanocomposites For The Detection Of Ethanol Vapour In Room Temperature	National	202341084841	Filed: 12-12-2023
4.	RESPOT Smart Respirator	National	202041037014	Published:27-08-2020

PAPER PUBLICATIONS:

International Journal : **20**

International Conferences : **11**

List of International Conference Publications:

1. Adharsh K, Arpit Agarwal, Sanjana Carol, Prajwal KP, Dr. Dr.Kendaganna Swamy S," Smart IoT-Enabled Approach for Enhancing Push-up Movements and Mitigating Muscle Fatigue", Proceedings of the 3rd International Conference on Sports Engineering at BITS Pilani-Nov 2023.
2. Rajasree PM, Adharsh K, Arpit Agarwal, Sanjana Carol, Prajwal KP, Dr. Kendaganna Swamy,"Design and Development of Sensor-Based Smart Belt for Enhancement of Performance in Powerlifting", Proceedings of the 3rd International Conference on Sports Engineering at BITS Pilani-Nov 2023.
3. Dr.Kendaganna Swamy S, Shaun Q. Y. Tan , Dr. Vishwanatha C." Acquisition and Analysis of Gait Characteristics using an Inertial Sensor Array" Proceedings of the 2nd International Conference on Sports Engineering-Aug 2021. .
4. Aayushii G., Nagarjun M.G., Sirurmah S.U., Swamy K. (2021) A Survey on Various Total Body Water Detection Techniques to Develop a Wearable Device. In: K V S., Rao K. (eds) Smart Sensors Measurements and Instrumentation. Lecture Notes in Electrical Engineering, vol 750. Springer, Singapore.
5. S Kendaganna Swamy, C P Ravikumar, B V Uma,," A hierarchical approach to self-test, fault-tolerance and routing security in a Network-on-Chip", IEEE 3rd International Test Conference India 2019.
6. S Kendaganna Swamy, Anand Jatti, B V Uma, Random arbiter and platform level design for improving the performance on 4x4 NoC, 2016 International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT), Year: 2016 Pages: 978 - 983, DOI: 10.1109/ICEEOT.2016.7754832, Publisher: IEEE.
7. Kendaganna Swamy S, Anil N, Dr. Anand Jatti, Dr. Uma B V,"Platform Level Design For Network On Chips" Advance Computing Conference (IACC), 2015 IEEE International Bangalore, India, 12-13 June 2015Page:16 – 19 Print ISBN: 978-1-4799-8046-8DOI: 10.1109/IADCC.2015.7154676 Publisher: IEEE.
8. Kendaganna Swamy S, Dr. Anand Jatti, Dr. Uma B V, "Performance Enhancement and Area Optimization Of 3x3 NoC Using Random Arbiter", 12-13 June 2015Page:11 – 15 Print ISBN: 978-1-4799-8046-8DOI: 10.1109/IADCC.2015.7154672, Publisher: IEEE.
9. Kendaganna Swamy, Sriram, Ranaganna Ramappa,"Reduction of statics power dissipation in SRAM",International conference of electrical, Electronics and computer Science Engineering, Chennai , 31st March 2013.
- 10.Gururaj C, Amitha Murthy, Kendaganna Swamy,"Various methods of wireless power transmission techniques for solar power satellites",International Conference on diversifying trends in technology and managements,,New Delli, March 2013
- 11.Kiran Balaji , Shashiraj Yadav, Kendaganna Swamy,"A review on different III-V Multijunction solar cells",International conference on diversifying trends in technology and managements,New Delli,March 2013.

List of International Journals Publications:

1. Dr.Kendaganna Swamy S, S. Varun, Srishti R, Jhanhavi R and Rohit K. M, "A review on transistor self-heating models, effects, and its prevention methods" Journal of Engineering and Technology Research, ISSN 1991-637X, 30 August 2023.(Article in press).
2. Dr. Kendaganna Swamy,Aayushii Goswami, Prameeth.H ,Prajwal.M," "System Verilog/UVM Verification of Nvme Controller" Journal of Huazhong University of Science and Technology,Volume 50, Issue 06 – 2021, ISSN-1671-4512,Dec 2021.
3. Dr.Kendaganna Swamy S, Dr. Subramanya KN, Prof. Shruthi.P, Dr.Ramaa A,"Metacognitive Proactive Hybrid Learning Model Using ICT Tools", Journal of University of Shanghai for Science and Technology, Volume 23, Issue 6, June -2021, ISSN: 1007-6735.
4. Dr.Kendaganna Swamy S, Shaila H Kopal, Sushmitha N, Shruthi P,, Dr.Uma B V," An Effective Practice of ICT Tools in Higher Education to Improve the Teaching Learning Process", Journal of University of Shanghai for Science and Technology, Volume 23, Issue 6, June -2021, ISSN: 1007-6735.
5. Kendaganna Swamy S, Anand Jatti, Uma.B.V," Design and Implementation of Secured Agent based NoC using Shortest Path Routing Algorithm", International Journal of Electrical and Computer Engineering (IJECE), Volume:9, No.2,. April, 2019,Pg.No.950-959. ISSN: 2088-8708.
6. Annesha Dasgupta , Manasa Potta , Vaishaka N. Raj , Meghana D. R , Dr. Kendaganna Swamy S "SoC Power Management Unit For IOT Applications", Science, Technology and Development, Volume X Issue VI , ISSN : 0950-0707 Page No : 169, JUNE 2021.
7. Srinivas Prabhu B, Kendaganna Swamy," Geospatial Visualisation of Devices Used for Security in Gated Communities" International Research Journal of Engineering and Technology (IRJET) Volume 8, Issue 7, July 2021,ISSN-2395-0072.
8. Manasa Potta, Esha Shashibhushan, Annesha Dasgupta, Kendaganna Swamy. S "Design and Analysis of Various Full Subtractor Methods to Propose a Customized Design for Enhancing the Performance of a SoC", International Journal Of Scientific & Engineering Research, Volume 11, Issue 12, December-2020, ISSN 2229-5518.
9. Kendaganna Swamy S, Anand Jatti, Uma.B.V," Reconfigurable High Performance Secured NoC Design using Hierarchical Agent-based Monitoring System", International Journal of Electrical and Computer Engineering (IJECE), Vol.8, No.6, December 2018. ISSN: 2088-8708. (Scopus)
- 10.Kendaganna Swamy S, Dr. Anand Jatti, Dr. Uma B V, A Literature Review of on-ChipNetwork Design using an Agent-based Management Method, International Journal of Engineering Research & Technology, Vol. 3 - Issue 12 ,December 2014
- 11.Kendaganna Swamy, Ashutosh A. P, Aveen M & , " A Review Paper on GPU-Based 3d-Ct Image Reconstruction has been published in ACADEMICIA (ISSN:2249-7137) ", Vol.4, Issue-1, (January, 2014).
- 12.Kendaganna Swamy S, Aparna and Madhumitha " Retinal Thickness measurements using optical coherence tomography" has been published in IASET ISSN:2278-9901,vol-3, Issue-1, Jan-2014
- 13.Kendaganna Swamy S,Priyanka Premnath and Srilatha.L.Rao "A review Paper on Forensic Watermark" ISSN 2321-9637,vol-1,Issue- 5, Dec-2013.

14. Kendaganna Swamy S, "Non-Invasive Brain to Brain Interface " ISSN : 2321-9637, vol-1, issue-5, Dec-2013
 15. Kendaganna Swamy S, Priyanka K.B, mamatha.B.V " A Review on Blind Navigation System" ISSN 2321-9637, vol-1, issue-5, Dec 2013.
 16. Kendaganna Swamy, Deepthi, Sumera Fahima, "Silicon solar Microcells" International Journal of energy and Science", International Journal of energy and Science, Volume 2, Issue 3, 2013, Page No 34-40
 17. Jafer, Nishanth, Kendaganna Swamy S, "Smart Cleaning Device For Various Platform", International Journal of Engineering Science Invention, Volume 2, Issue 4, 2013, Page No 43-47.
 18. Kendaganna swamy s, Pradeep, "Eye controlled human machine interface", International Journal of Advanced Research In Computer And Communication Engineering, Volume 2 Issue 5 -May 2013, Page No 2205-2209.
 19. Kendaganna swamy S, Ranganna Ramappa, Sriram K V, "Design of low power 64 bit SRAM using 13T cell", International Journal of Engineering Research And Technology, Volume 2 Issue 5- May 2013, Page No 1350-1352.
-

List of National Conference Publications:

1. Veena Divya K, Rajasree.P.M ,Dr.Kendaganna Swamy, Dr.CH.Renu Madhavi ,Dr.Uma.B.V "Emphasize Critical Thinking on Engineering Students using Think-Pair-Share Technique", CTGZMA-October 2021 National conference at RVCE.
2. Rajithkumar B K, Uma B V, Kendaganna Swamy, Basavaraja R J, "Enhance the Critical Thinking ability among Engineering Students using Problem based Learning", CTGZMA-October 2021 National conference at RVCE.
3. Mr. Kendaganna Swamy.S," Smart Air-Conditioning System for intelligent Transportation." National Conference on Leveraging Intelligent Transportation System for Enabling Smart Cities (ITS-2017) on 2nd - 4th March 2017.
4. B.S.Sathynarayana, S.Jaganathan, K.Swamy, "Study of self aligned Nano carbon based emitters and Nano sphere lithography process for Growth Vacuum Nan electronics X-Ray Source and Thz sources for medical applications", National conference on micro & Nano fabrication at CMTI, Bangalore.
5. B.S.Sathynarayana, K.Swamy , "Room temperature grown novel multi layered Nano Carbons based Vacuum Nano electronics Electron Emitter for sensors & Lighting", National conference on micro & Nano fabrication at CMTI, Bangalore.
6. B.S.Sathynarayana, K.Swamy , " Setting up of an affordable Infrastructure fir Design, Development and packaging of flexible electronics and vacuum Nano electronics devices, sensor and MEMS based systems", National conference on micro & Nano fabrication at CMTI, Bangalore.

List of National Journals Publications

1. Vishnumurthy K.A., Girish K.H., Kendaganna Swamy S. "Naked Eye Detection of Fluoride Ions using Simple Dihydroxy Chalcone Sensor", RVJSTEAM, Volume 4, Issue 01, ISSN: 2582 - 8819 , Jan 2023.

Awards / Achievements:

Sl. No.	Award / Achievement Details	Awarded by – Organization Name
1.	Appreciation on patent publication	RSST-2024
2.	Teaching and Learning Awards	IUCCE- ICTIEE -2024
4.	Best Young Teacher Award	RVCE -2019
5.	Appreciation on patent publication	RSST -2019
6.	Appreciation on paper publication	RSST-2018
7.	My research paper got selected in Tire one International conference – all over the world there are only 24 papers got selected in the year of 2019.Out of 24 papers from India 7 papers got selected in that my paper also one and all other 6 papers from industry.	IEEE International Test Conference India 2019
8.	Nominated has a Technical Program Committee (TPC) member for INDICON-2021.	organized by IIT Guwahati, India. (Nominated on 10th Aug 2021)

NUMBER OF PROJECTS GUIDED TO UNDER GRADUATE STUDENTS : 29

Sl. No.	Project Title
1.	Design and develop a system for home electrical energy monitoring system
2.	Automatic Pet Feeder Machine
3.	Smart Breaking system in electrical vehicle
4.	Design and development of an toxic ammonia gas sensor
5.	Design and development of a low cost, automated Hydroponics system.
6.	Development of novel IoT sensor for the selstive recognition of hydrogen sulphide gas using green polymer nano composites.
7.	Error detection in memory based on signature testing in LFSR

8.	Smart Information KIOSK
9.	Temperature sensing with attendance monitoring system
10.	IoT based color sorting system
11.	Smart tire pressure monitoring system
12.	Voice controlled robotic ARM using Neural Networks
13.	Real time battery temperature monitoring and its analytics system for EV's
14.	Deep learning based ROBOT for automatic picking up garbage on the field
15.	IoT Based Smart Farming System
16.	Design and Development of a Universal Hashing Algorithm for Authentication in Quantum Cryptography” (Got 2nd place in college level for best innovative project)
17.	Hardware In Loop (Hil) Test Setup And Automation For Gateway System.
18.	Design and development of Smart Library System
19.	Design and development of Smart Health Care System
20.	GSM operated irrigation valve controllers with intrusion detection.
21.	Design and development of channel coding technique for 4G/5G.
22.	Design and development of a system for monitoring knee movement of elderly and injured people.
23.	Design a system that recognizes gestures of sign language and displays alphabets and words along with audio output.
24.	Design and Development of RF based smart shopping cart for supermarkets.(Shortlisted for patent filing)
25.	Design and Development of power line instrument communication system
26.	Voice alert system for blind people
27.	“Aquamate” an instrument to measure Potable water (Shortlisted for patent filing)
28.	Power minimization in SRAM using stack forcing technique.
29.	Smart cleaning device for various platform

NUMBER OF PROJECTS GUIDED TO POST GRADUATE STUDENTS : 3

Sl. No.	Project Title
1	Implementation of NOC Architecture using Wishbone bus interface for improved latency and performance on FPGA.
2	Enhancement of performance on NoC using Platform level Design.
3	Design and Develop a robots display to display the campus air pollution, humidity, temperature, and date with time.

INTERACTION WITH OTHER COLLEGES:

1. BoS member in Department of Electronics and Communication Engineering, PES college of Engineering, Mandya for a period of two years (from 2020-22).
2. BoE member in Department of MCA, National college Mandaya for a period of one year (2021).

FOLLOWING ARE THE PROJECT PROPOSAL SUBMITTED TO DIFFERENT FUNDING AGENCIES:

R&D Projects 2020-21

1. Proposal submitted to DBT on “Development of sleep-interface olfactometer and its application in target Memory Reactivation in mild cognitive impairment – A proof of concept study”, April 2021

R&D Projects 2019-20

1. Project proposal submitted to VGST Grant under the scheme Research Grants scheme/Faculty, on **“A portable powered airflow respirator device with enhanced functionalities”**.

R&D Projects 2018-19

2. Project proposal submitted to VGST Grant under the scheme Research Grants scheme/Faculty, on **“Developing sensor based equipment for anthropometric measurement for human using IoT.”**

R&D Projects 2017-18

1. Project proposal submitted to AICTE on **“Faculty Development program on “e-based Hybrid- Flexible Course Design”**.
2. Joint Project proposal submitted to HCL – **RSST Digital Competency Center for Rural Education and Empowerment- (DiCCREE)**.

R&D Projects 2016-17

Project under COE:(fund recived Rs 25,000)

Status : Completed

Title : PVDF based Cardiorespiratory Sensor” as Co-investigator.

Paper publication on this project :

Dr.K.V.Padmaja, Dr. Shaman M. P, Mr. Kendaganna Swamy, “PVDF Based Cardio-respiratory Sensor”, First International Conference on Large Area Flexible Microelectronics ILAFM Dec 2014.

INDUSTRY – UNIVERSITY COLLABORATION:

University collaboration for Social Impact with RBEI (Robert Bosch Engineering and Business Solutions Private Limited) for 6 months. Started on 28th July 2021.

1. Started developing web application along with students.
2. Started series of webinar on “BLOCKCHAIN”.

INDUSTRY PROFESSIONAL EXPERIENCE AND ACCOMPLISHMENTS

PROJECT NAME	: SISO Mobile Browser Testing
Client	: Samsung, Bangalore.
Company	: Integra Micro Software Services,
Role	Bangalore.
Project Duration	: Software Test Engineer.
	: May 2010 to Feb 2011.

Brief Project Description:

Sanity Testing, System Testing, Conformance Testing, Performance Testing, Stability/Stress Testing of 3G Mobile Browser in 2.5G network. The Browser is based on Webkit 3.2. Webkit is an open source web Browser engine and is used by applications such as Apple Safari Browser and Dolfine browser.

Responsibilities:

- Responsible for testing and validation of all integrated Software.
- Involved extensively in Conformance Testing, Functional Testing, Regression Testing, Ad-hoc Testing, and Security Testing.
- Reporting the test execution summary.
- Involved in formal reviews, walk-through and quality inspections.
- Reviewing documents, manuals, test cases.
- Conducted black box testing.
- Understanding of the requirements and creation of the test cases and successful execution of the same.

PROJECT NAME

	: XP1 Mobile Application Testing
Client	: Sonim
Company	: Sonim Pvt Ltd

Role : Test Engineer
Project Duration : One Year

Brief Project Description:

Testing of mobile applications like Voice call, Phonebook/Address book, Calendar, Media gallery.

Responsibilities:

- Executing the test cases, writing test reports, error reports.
- Involved in Sanity, Functional and Regression testing of various applications.
- Raising bugs in the defect tracking system and tracking them.
- Responsible for updating of Traceability sheet for my particular applications.
- Flashing the proper software into the PUT.
- Flexing the Seem element as per the requirement.

Accomplishments:

- Responsible for coordination and delivery of the modules within scheduled time frame.
- Performing sanity testing before accepting the system for system testing.

PH.D RESEARCH WORK DETAILS:

Design and Implementation of Secured Agent based Management System for NoC

The agent-based NoC method motivates and provides a research scope to enhance the feature of fault-tolerant agents. In the research study, it proposes a system using agents that not only provides the faulty and congestion information but also takes the decision whether the packet can be transferred or stopped to the Processing Element with the notion of the control mechanism for authorization as a secure agent. Such secured agent provides multi-facet benefits such as placing the firewall on the chip is safer from the hackers compared to the off-chip firewall. In addition to this, the design of secured cell agent provides a capacity to handles the status prioritization of the high significance and low significance nodes. This information is used by agents to forward the packet or stop the packet to the node and overcome the livelock situation. The proposed design introduces the Error Packet Elimination Layer that supplies the error-free packets to the network and modification of the router arbiter to further enhance the performance of the network. Besides, the area overhead is compared with a different routing algorithm to suggest the best algorithm for agent-based NoC system. The results reveal that hardware utilization of Secured Cell Agent based design using Shortest Path Routing Algorithm is 53.50% less as compared to the XY routing

algorithm. The promising reduction of the area utilization and network performance improvement ensures that the secured cell agent based NoC management system design requires less silicon area.

PERSONAL STRENGTHS

- Good communication skills.
- Good understanding capabilities
- Adaptable to changing environments.
- Aptitude to learn new areas, by self-development, training and working.
- Accepting new responsibilities and networking of people

PERSONAL DETAILS

Date of Birth	: 11-07-1984
Father's name	: Shrikantappa P
Permanent address	: #428, Dheemantha Nilaya, 3 rd main, 10 th Cross, KHB Layout, Suncity, Kengeri upanagar, Bengaluru-560060 : Married
Marital Status	
Languages Known	: English, Kannada, and Hindi
Nationality	: Indian

DECLARATION

I hereby declare that the information and particulars mentioned above are true and correct to the best of my knowledge.

Date:4-02-2024

Place:Bengaluru

Kendaganna Swamy

(Dr.Kendaganna Swamy)

