

SARANYA. V
Assistant Professor
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Personal Profile

An enthusiastic Instrumentation engineer with post-graduation in “Remote Sensing and Wireless Sensor Networks” having a passion to work in a competitive and challenging atmosphere and contribute the best of my ability towards the growth and development of the organization.

| Course | Name of the Institution | Board / University | Year | Percentage |
|---|---|----------------------|------|------------|
| M tech : Remote Sensing and wireless sensor networks | Amrita Vishwa Vidhyapeetham | Amrita University | 2014 | 72.1% |
| PG Diploma : Embedded system | CDAC Trivandrum | Central Govt | 2011 | 81.25% |
| B Tech : Electronics and Instrumentation | Sarabhai Institute of Science and Technology | CUSAT | 2011 | 67.50% |
| Higher Secondary | Nirmala Bhavan Higher Secondary School | Kerala state | 2007 | 73% |
| SSLC | St Thomas High School | Kerala state | 2005 | 82% |

Work Experience

- Currently working as a guest lecturer in Cochin University of Science and Technology, Thrikakara **(July 2014)**

Projects Undertaken

- **3D PRINTER BASED LOW COST SPECTROMETER SPECTRUM CLASSIFICATION** (2014)
Using 3D printer a low cost model of the DIY spectrometer is made. Using that spectrum of different sources like LED, sunlight and incandescent lamp is taken. Its spectrum analysis is done compared and also accuracy is found out using random kichenson function.
- **WIRELESS SENSOR BASED SPRINKLER CONTROL FOR IRRIGATION SYSTEMS** (2013).
This low cost automatic irrigation system which finds an ultimate solution for the problems regarding water scarcity and agricultural yield. WSN having autonomous sensors spatially distributed, the system can bring in considerable changes to the agricultural system. WSN is used to monitor physical or environmental conditions, such as temperature, sound, pressure, etc and to cooperatively pass their data through the network to a main location. It will work collaboratively to sense and process various physical parameters. Wireless sensor device that we have used for our gardening system is motes. Its small size enables its deployment for large areas easily.
- **REAL-TIME VIDEO STREAMING USING GSTREAMER IN GNU RADIO PLATFORM** (2014)
Real time video transmission using GStreamer in GNU Radio platform. The system includes the transfer of data, images, video etc. on the same medium which is being used for the voice transmission in the past decades. This imposes an additional capacity to the system and requires more comprehensive structure to be dealt with these types of signal processing.
- **AUTOMATION OF PACKAGE BOILER USING DCS** (2011)
Automation of package boiler using DCS in order to automate the whole process in an industry we need to measure, monitor and control the actions related to the performance of each instrument in the field .As we automate the package boiler using DCS we can control entire processes taking place in the field using a computer. By this method we can reduce the human efforts in checking the status of the process and also we can save time.
- **SESMIC SENSOR** (2010)
A seismic sensor is used to detect vibrations/sounds. It is very sensitive and can detect vibrations caused by the movement of animals or human beings. So it can be used to monitor unprotected areas to restrict entry of unwanted persons or animals.
- **Seminar on SPACE ELEVATOR** (2011)
Space elevator is a proposed non-rocket space launch structure .A structure designed to involve travelling along a fixed structure instead of using rocket-powered space launch, and most often a cable that reaches from the surface of the Earth or near the equator to geostationary orbit (GSO) and a counterweight outside of the geostationary orbit is used.

Skills

- Basic C, C++ and Embedded C programming
- Linux shell scripting, Linux kernel programming
- Geo referencing using ARGIS software
- Matlab and Simulink
- GNU Radio

Publications and Certificates

- On a methodology for real-time video streaming using low cost hardware and an open source software platform.
 - Article : Real-time video streaming using GStreamer in GNU Radio platform
 - Conference : International Conference on Green Computing, Communication and Electrical Engineering (ICGCCEE'14)
- Completed basic course on “Remote sensing, Geographical Information system and Geographical position system” conducted by IIRS.
- Completed a basic course on “Geoweb services – Technology and applications” conducted by IIRS.

Achievements

- 2nd prize in National level Seminar on Laser Technology.
- Organized and session taken in SDR workshop conducted by Amrita Viswa Vidhyapeetham.

Hobbies

- Reading and writing articles
- Music
- Drawing

Personal Details

- Name - Saranya V
- Gender - Female
- Date of birth - 04/12/1989
- Languages known - English, Hindi, Malayalam, Tamil
- Address - Arun Nivas CRA112
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I hereby declare that all the above details are true to best of my knowledge

Saranya V

