**REKHA**

[**Rekha.367845@2freemail.com**](mailto:Rekha.367845@2freemail.com)

**EXPERIENCE**

|  |  |  |
| --- | --- | --- |
| Organization/Institute | Designation | Duration |
| Techzone Technologies LLC.  Dubai. | Archieves Clerk | 5 months  *26thNovember 2016 to till date.* |
| Sri Venkateshwara College of Engineering, Vidya Nagar, Bangalore, Karnataka, India | Assistant Professor in Electronics and Communication Engineering | 1.5 years  *20th July 2015 to 12th November 2016* |
| Vemana Institute of Technology, Bangalore, Karnataka, India | Assistant Professor in Electronics and Communication Engineering | 3.4 years  *21st  July 2010 to*  *30th November 2013* |
| State Bank of India  Local Head Office  Trivandrum, Kerala | Assistant | 1.6years  *5th January 2009 to*  *3rd July 2010* |
| University College of Engineering  Trivandrum, India  *(Managed by University of Kerala)* | Lecturer in Electronics and Communication Engineering | 2.4 years  *19th July 2006 to*  *3rd November 2008* |
| Sree Chithira Thirunal College of Engineering, Pappanamcode, Trivandrum, Kerala, India | Lecturer in Electronics and Communication Engineering | 3.6 years  *1st January 2003 to*  *18th  July 2006* |

**EDUCATION**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Degree | Year | Institute | University | Specialisation | Grade/Class |
| Master of Science | September 2013 | Manipal University  Manipal  Karnataka  India | Manipal University  Manipal  Karnataka  India | Embedded and Control System Design | First Class  72%  CGPA: 7.79 |
| Bachelors in Technology | June 2002 | Rajiv Gandhi Institute of Technology  Kottayam  India | Mahatma Gandhi University Kottayam  Kerala  India | Electronics and Communication Engineering | First Class  66%  CGPA: 7.11 |

**COURSES TAUGHT**

At Sri Venkateshwara College of Engineering (2015 to 2016) – For Under Graduate Courses

1. Basic Electronics (2015)
2. Analog Electronic Circuits (2016)
3. Network Security (2016)
4. Microprocessors Lab (2015)
5. Analog Electronics Lab (2015, 2016)

At Vemana Institute of Technology (2010 to 2013) – For Under Graduate Courses

1. Electronic Circuits (2010, 2011, 2012)
2. Microprocessors (2010, 2011, 2012)
3. Logic Design (2011, 2012)
4. Analog Electronic Circuits (2013)
5. Optical Fiber Communications (2013)
6. Electronic Circuits Lab (2010, 2011, 2012)
7. Microprocessors Lab (2010, 2011, 2012)
8. Analog Electronics Lab ( 2013)

At University College of Engineering (2006 to 2008) – For Under Graduate Courses

1. Electronic Circuits (2006)
2. VLSI (2006)
3. Basic Electronics Engineering (2007,2008)
4. Electronic workshop (2007,2008)
5. Electronic Circuits Lab (2006)

At Sree Chithira Thirunal College of Engineering (2003 to 2006) – For Under Graduate Courses

1. Computer Networks (2003)
2. Electronic Circuits (2004)
3. Television Engineering (2005)
4. Electronic Instrumentation (2004)
5. Computer Hardware (2003)
6. Digital Electronics (2005, 2006)
7. Electronic Workshop (2003)
8. Electronic Circuit Lab (2004)
9. Digital Electronics Lab (2005,2006)

**ADMINISTRATIVE RESPONSIBILITIES**

Sri Venkateshwara College of Engineering, India

* Revaluator and coordinator for International Conference
* Exam Cell Assistant Chief Superintendent
* Final Year Class Teacher
* Arts festival Staff in charge
* Time table Co-ordinator
* Test Co-ordinator

Vemana Institute of Technology, India

* External Deputy Chief Superintendent
* Exam Cell Assistant Chief Superintendent
* Second Year Class Teacher
* Arts festival Staff in charge
* Time table Co-ordinator
* Test Co-ordinator

University College of Engineering, India

* Staff Advisor
* Staff in charge Arts Club

Sree Chithira Thirunal College of Engineering India

* Staff Advisor
* Time Table co-ordinator
* Staff in charge Arts Club

**CONTRIBUTION FOR ENGINEERING LAB AND LAB MANUALS DEVELOPMENT**

University College of Engineering

1. Electronics Workshop Lab

Vemana Institute of Technology

1. Electronic Ciruits Lab Manual

Venkateshwara College of Engineering, India

1. Electronic Ciruits Lab Manual

2. Microprocessors Lab Manual

**CONFERENCES/WORKSHOPS/ SHORT-TERM COURSES ATTENDED**

RTEICT 2016

Mission 10X by Wipro from August 1th 2011 to August 5th 2011

**SOFTWARE SKILLS**

Design Tools: Mathlab

Programming language: C, C++.

Operating systems: Windows

Simulation Tools: Orcad, Pspice

**THESIS AND PROJECT WORKS**

Master’s Degree Thesis work Title: “*Speech Enhancement Using Adaptive Filter”*

*Abstract: Speech enhancement aims to improve speech quality by using various algorithms. The objective of enhancement is improvement in intelligibility and/or overall perceptual quality of degraded speech signal using audio signal processing techniques. Enhancing of speech degraded by noise, or noise reduction, is the most important field of speech enhancement, and used for many applications such as mobile phones, An adaptive filter is a filter that self-adjusts its transfer function according to an optimization algorithm driven by an error signal.*

*The preprocessing unit mimics human auditory system by roughly emulating cochlea by non-uniform band pass ﬁlter bank. We construct ﬁlter bank with center frequencies of sub-bands based on approximation of target speaker fundamental frequency. Then we incorporate blind signal separation method for each sub-band signals, to extract maximum information that represent target speaker speech.*

*Adaptive filters are required for some applications because some parameters of the desired processing operation (for instance, the locations of reflective surfaces in a reverberant space) are not known in advance. The adaptive filter uses feedback in the form of an error signal to refine its transfer function to match the changing parameters. By this project we designed an adaptive filter so that it learns the noise characteristics and removes it. The project work is carried out on Matlab, for real time implementations it is carried out on DSK TMS320C67 processor.*

Bachelor Degree Main Project work Title: “PC based Modular Seven Segment Display*”*

*Abstract: Moving signs are a common enough sight today but off-the-shelf units are invariably expensive and somewhat inflexible.The six character module in this project can be cascaded upto 16 modules long and has a character set that can be cutomized to suit our application and has the advantage of lowcost than a ready-built unit.*

Bachelors Degree Mini Project work Title: “*12V 40W Tube-light Inverter”*

*The principle of oscillation is used in this circuit. The charging and the discharging section of the circuit works automatically. The circuit mainly consists of two oscillatory circuits, one is of low frequency output and the other is of very high frequency output, about 20KHz which is more than sufficient to light a 40W tube-light.*

**PERSONAL INFORMATION**

Nationality : Indian

Religion : Hindu

Marital Status : Single.

Date of Birth : 7th December 1980

Age : 36 years