

RESUME

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Career Objective

To work in a good environment and be associated with a leading organization and help achieve the organizational objectives in the most efficient manner by applying my skills and abilities, there by growing with the organization.

- ❖ **Ph. D in S V University**, Tirupati, in the Area of **Digital Image Processing**.
- ❖ Certificate Course in **Solar Power Installation, Operation and Maintenance** in NIELIT Calicut, Govt of India, kerala.
- ❖ **PG Diploma (Embedded Systems)** from DOEACC Centre, Calicut, Govt of India, Kerala.
- ❖ **M.Tech (Embedded Systems)** from Annamacharya Institute of Technology & Sciences, Rajampet, Kadapa (Dt), Andhra Pradesh.
- ❖ **B.Tech (Electronics and Communication Engineering)** from Srinivasa Institute of Technology and Mangement Studies, Chittoor, Chittoor (Dt), Andhra Pradesh.
- ❖ **Intermediate Education** from C.K.M.Teja Junior College, Naidupet, SPSR Nellore (Dt), Andhra Pradesh.
- ❖ **SSC** from Z P Boys High School, Naidupet, SPSR Nellore (Dt), Andhra Pradesh.

(a) Referee No. 1: Dr. T. Ramashri

Professor, Department of Electronics and Communication Engineering, S V University, Tirupati - 517502

Phone: 09346465050

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(b) Referee No. 2: N. Srinivasa Rao

Associate Professor, Department of Tele Communication Engineering, BMS College of engineering, Bangalore -

560019

Phone: 09448537873

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Technical Skills:

Microcontrollers

Cirrus Logic : EP9315 (ARM9)

Microchip : PIC16f877A

Atmel : 89C52

Programming Languages- C & Assembly Languages

Software packages- MP lab,keil,Codewarrior

PCB Designing tool- ORCAD

Interfacing- LCD, Matrix Keyboard, 7 Segment Display,A/D converter,D/A converters ,
Memory Units,Sensors.

Protocols -I2C, RS232,SPI

Having good knowledge in OS and RTOS concepts(Embedded Linux,RTLlinux,VxWorks)

Professional Experience:

- At present, I am working as Associate Professor in **Marri Laxman Reddy Institute of Technology and Management (MLRITM) Dundigal, Hyderabad**, from June 2019 to Till date.
- Worked as an Associate professor from January 2017 to June 2019. In **VAISHNAVI INSTITUTE OF TECHNOLOGY , TANAPALLI , TIRUPATI , CHITTOOR(DIST)**.
- Worked as an Associate professor from Septmber 2014 to December 2016. In **NAGOLE INSTITUTE OF TECHNOLOGY AND SCIENCE, Kuntloor(VI), HYDERABAD, RANGA REDDY (DIST)**.
- Worked as an Assistant professor M.Tech Evening Course from December 2012 to April 2014. In SVU College of Engineering, **SV UNIVERSITY, TIRUPATI, CHITTOOR(DIST)**.
- Worked as an Lecturer from October 2007 to December 2010. In **MEKAPATI RAJAMOHAN REDDY INSTITUTE OF TECHNOLOGY & SCIENCE , UDAYAGIRI - 524226, NELLORE (DIST)**.

Journals:

- 1) N. Udaya Kumar, T. Ramashri, "The Detection of AMD in Human Eye's Retina Using Image Segmentation Algorithms", International Journal of Advances in Science and Technology(IJAST), Vol.3, No.4,2011, Special Issue ISSN 2229-5216, pp.160-164.
- 2) Udaya Kumar Naluguru, Dr.T.Ramashri , Prashanth B.U.V "Color Segmentation Based Staining Method Used in Biomedical Applications", Journal of Innovation in Electronics & Communication(JIEC) -Special Issue, ISSN: 2249-9946,Volume 2, Issue 2,PageNo: 236-238, Jan 2012.
- 3) Udaya Kumar Naluguru, Dr.T.Ramashri , Venkat B.Prasanth "A MATLAB Based Algorithm Design for New Structural Feature of Retinal Image Vasculature Pattern" , International Journal of Electronics and Computer Science Engineering (IJECSE) ISSN: 2277- 1956 , Volume 2 ,page No:27-31,Dec 2012.
- 4) N Udaya Kumar, T. Ramashri, "An Automated Technique for Diabetic Damage Detection Through Blood Vessel Segmentation in Retinal Images", International Journal of Electrical and Electronics Engineering Research (IJEEER) - ISSN(P): 2250-155X; ISSN(E): 2278-943X Vol. 4, Issue 1, Feb 2014, pp.77-84.
- 5) Naluguru Udaya Kumar, Ramashri Tirumala, "A Cross Layer Approach for Feature Extraction with Accurate Detection through Blood Vessel Segmentation in Automatic Diabetic

Retinopathy”, Australian Journal of Basic and Applied Sciences (AJBAS) – ISSN: 1991-8178, Vol. 9, Issue 36, Dec 2015, pp.524-534.

- 6) Naluguru Udaya Kumar, Ramashri Tirumala, “Accurate Detection of Retinal Tears Based on Neural Network Using Fourier series Power Spectrum Segmentation Technique”, International Journal of Applied Engineering Research (IJAER), ISSN 0973-4562, Vol.12, No.1, pp.158.165, 2017.
- 7) Naluguru Udaya Kumar, [2] Tirumala Ramashri “ Increased Learning in Retinal Blood Vessel Segmentation Approach based on Fuzzy-C Means Clustering and Mathematical Morphology” International Journal of Engineering Research in Electronics and Communication Engineering (IJERECE), ISSN (Online) 2394-6849 , Vol 4, Issue 3, March 2017 ,pp.135-141,Impact Factor: 3.689
- 8) Naluguru Udaya Kumar, Ramashri Tirumala, “Identification of Diabetic Damage Detection in Retinal Images using ANFIS”, International Journal of Advance Engineering and Research Development (IJAERD), ISSN:2348-4470 Vol.05,Issue.2,Feb.2018,pp.712-718. (Thomson Reuters & UGC Approved)
- 9) S.China Venkateswarlu, Naluguru Uday Kumar, N.Sandeep Kumar, Aannam Karthik, V.Vijay “ Implementation of Area optimized Low power Multiplication and Accumulation”, International Journal of Innovative Technology and Exploring Engineering (IJITEE), ISSN:2278-3075 Vol.9, Issue.1,Nov.2019,pp.2928-2932.
- 10) S China Venkateswarlu, N Udaya Kumar, Sandeep Kumar N, Karthik A, V Vijay "Implementation of area optimized low power multiplication and accumulation", International Journal of Innovative Technology and Exploring Engineering, Vol.9, PP 2928-2932., 2019. DOI: 10.35940/ijitee.A9110.119119.
- 11) Naluguru Udaya Kumar, A. Ushasree, Ramashri T, Shijin Kumar P.S, Abhilash K.S, "Skin Tone Recognition and Face Detection using Local Binary Pattern and Sparse Coding", Test Engineering and Management, Vol.83, PP. 14249 - 14255, 2020.
- 12) S China Venkateswarlu, Naluguru Udaya Kumar, K Chaitnaya, A Ushasree “Effect of feature normalization objective improvement of over noisy single-channel speech enhancement with Neural network”, Test Engineering and Management, Vol.83, PP. 8121 - 8131, 2020.
- 13) Thelapolu Nikitha, Naluguru Udaya Kumar, Shijin Kumar P.S “Hamming distance of the trellis coded block codes and application in bit error rate tool”, International journal of advanced science and Technology, Vol.29, PP. 5190-5198, 2020.
- 14) Gumasta Sandhya, Naluguru Udaya Kumar, Bhushan Kundeti “High Speed Power Efficient Carry Select Adder Design”, International journal of advanced science and Technology, Vol.29, PP. 1346-1354, 2020.

Patents

- [1] Dr. Chukka Santhaiah (Associate Professor, Cse Dept.), Mr. Pitty Nagarjuna, Dr. Naluguru Udaya Kumar (Dept. Ece), Dr. R. Poonkuzhali (Associate Professor), Prof. (Dr.) S. B. Chordiya (Director-Simmc-Campus), Dr. Yashpal Singh, "Intelligent Image Processing Technology For Textured Cutting Tool Wear Measurement In Turning Process. ", intellectual property india, The Patent Office Journal No. 32/2019 Dated 09/08/2019. Link: http://www.ipindia.nic.in/writereaddata/Portal/IPOJournal/1_4777_1/Part-1.pdf
- [2] Dr. Chukka Santhaiah (Associate Professor, Cse Dept.) Dr. Naluguru Udaya Kumar (Department Of Ece) C Raghavendra (Assistant Professor Dept. Of Cse) Mr. Parag Prakash Zodge, Dr. M. Umadevi, "Intelligent Fish Pot To Detect The Five Parameter Using Deep Learning", intellectual property india, The Patent Office Journal No. 38/2019 Dated 20/09/2019. Link: http://www.ipindia.nic.in/writereaddata/Portal/IPOJournal/1_4789_1/Part-1.pdf
- [3] Dr. Naluguru Udaya Kumar (Department Of Ece) Dr. Shijin Kumar P S Dr. Abhilash K.S Dr. Chukka Santhaiah (Associate Professor, Cse Dept.) " I-Automobile: Intelligent Automobile With Combination Of Camera, Radar ,Advanced Sencer-Q7 And Radio Frequency Communication Work Together With Sensor Fusion.", intellectual property india, The Patent Office Journal No. 51/2019 Dated 20/12/2019. Link: http://www.ipindia.nic.in/writereaddata/Portal/IPOJournal/1_4821_1/Part-1.pdf

Books

- [1] Dr. N. Udaya Kumar, "Segmentation Algorithms for Retinal Image Analysis, LAP LAMBERT Academic Publishing, International Book Market Service Ltd, December and 2019, ISBN No: 978620-0-32466-5

Workshops Attended:

| Sl. NO | Name of the Workshop | Place | Title | Month & Year | National or International |
|--------|---|-----------|---|---------------|---------------------------|
| 1 | Faculty Updation Programme(SVU) | Tirupati | L-Band Data Processing for Remote Sensing Applications and Numerical Weather Prediction | November-2016 | National |
| 2 | Faculty Updation Programme(CDAC) | Hyderabad | Digital VLSI System Design using Verilog HDL | December-2015 | National |
| 3 | Faculty Updation Programme(CDAC) | Hyderabad | Embedded System Design using ARM Cortex M3 | December-2014 | National |
| 4 | Advances in Signal and Image Processing | Tirupati | Advances in Signal and Image Processing | April-2014 | National |

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|----|---|---------------------------|---|-----------------|----------|
| 5 | ISTE-IIT Kharagpur | Remote center Hyderabad | Signals and Systems | February-2014 | National |
| 6 | ISTE-IIT Bombay | Remote center Tirupati | Analog Electronics | June - 2013 | National |
| 7 | ISTE-IIT Bombay | Remote center Tirupati | Introduction to Research Methodologies | June - 2012 | National |
| 8 | Emerging Directions in Image Processing And Understanding | SSN-Kalavakkam, Tamilnadu | Emerging Directions in Image Processing And Understanding | February - 2012 | National |
| 9 | ISTE-IIT Bombay | Remote center Tirupati | Writing Effective Conference Papers for Engineering/Science | February-2012 | National |
| 10 | RME-2K11 | AITS-Rajampet | Research Methodology | December-2011 | National |
| 11 | UGC-SVC centre for MST RADAR Applications | SVU - Tirupati | Cloud Computing | November-2011 | National |
| 12 | Advanced Embedded Systems | SVU - Tirupati | Vision Robotics Using Advanced Embedded Systems | August - 2011 | National |

Subjects Taught:

1. Electronic devices and circuits 2. Switching theory and logic design 3. Analog communication 4. Digital communication 5. Network theory 6. Embedded systems 7. Microwave circuits 8. Digital image processing 9. Analog and Digital IC applications.

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| PG Diploma Project | |
| Project Name: | Path Memory and Automatic Tracking System With Block Detection |
| Software used | : Keil C , GSM Module WISE 51, Orcad PCB Design |
| Hardware Used | : AT89C52 |
| Aim | : RTOs approve in the design of automatic tracking system for calculating the path memory of vehicle. To record the path of the vehicle or moving systems and stores it in the memory. |
| Future | : Suitable arrangement for measuring velocity can be done and according to the velocity number of steering coordinates recorded and tracked can be increased or decreased. |
| M.Tech Project | |
| Project Name: | Implementation of I ² C Protocol and 1-Wire Digital Technology Using Real Time Clock |

Software used : Keil Compiler, Orcad PCB Design

Hardware Used : ATMEL 89C52

Aim : This system is to implement inter integrated circuit I2C Protocol based Digital Thermometer. To read the temperature based on I2C temperature sensor, and displayed through LCD. The above task can be achieved dallas micro controller.

Future : Most available I2C devices operate at speeds up to 400Kbps, with some venturing up into the low megahertz range. I2C is easy to use to link multiple devices together since it has a built-in addressing scheme.

B.Tech Academic Project

Project Name: Troubleshooting Circuit Design for Microprocessor Based Controller Card

Software used : Keil C ,Orcad PCB Design

Hardware Used : AT89C52

Aim : The electrostatic precipitators(ESP) perform a vital role in precipitating the dust and fly ash content of polluted air released out by the production power plant and cement industries BREL1 BAP1 Ranipet manufactures large number such ESPs and the controllers used in ESP to provide current and voltage supply to its electrodes.

BAPCON is a microprocessor based controller system containing a CPU card, IO card and the power supply unit. For the optimum operation of the BAPCON all the inner parts of the system need to work fair so that it can generate an appropriate control signals.

Personal Profile

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|-------------------|--|
| Full name: | Naluguru Udaya Kumar |
| Father's Name | N.Bhushaiah |
| D.O.B | 20 th june 1983 |
| Nationality | Indian |
| Permanent Address | N. Udaya Kumar #82, Nandavanam B street, Jogupalya main Road, Halasuru, Bangalore-560008 |
| Phone Number | +91 9849858667, +91 7019875539, |
| Gender: | Male |
| Languages: | English. and Telugu |
| Hobbies: | Reading technical books and Playing cricket |

I here by declare that all information furnished above is true to the best of my knowledge and belief.

Date -: 09-12-2021

N. Udaya Kumar