

R V H PRASAD



Designation : Assistant Professor

E-Mail ID : rvhprasad@vrsiddhartha.ac.in

Contact at : EC-350B, Incubation Centre

Department of Electronics and Communication Engineering,
Velagapudi Ramakrishna Siddhartha School of Engineering,
Siddhartha Academy of Higher Education,
(Deemed to be University)

Kanuru, Vijayawada, Krishna (Dt.),
Andhra Pradesh 520007-.

Ph# 814-223-4445

Education

(Ph. D) (VLSI Architectures)

National Institute of Technology, Andhrapradesh (NIT-AP)

M.Tech (LASER And Electro-Optical Engineering)

2008, Anna University, Chennai

B.Tech (Electronics and Communication Engineering)

2005, Jawaharlal Nehru Technological University, Hyderabad

Experience

Period	Designation	Institution / Organization
2011-Present	Assistant Professor	Velagapudi Ramakrishna Siddhartha Engineering College
2008-2011	Assistant System Engineer	TATA Consultancy Services (TCS)

Research Interests

Broad Area of Research :

Embedded Systems, VLSI Signal processing

Courses Taught

PG

- Real Time Operating System
- Advanced Computer Architecture
- CPLD And FPGA Architectures
- Real Time Systems
- Fiber Optic Communications
- Location Based Services
- Electronic Toll Collection-Rfid
- RTOS For Embedded Applications
- Embedded Software Design
- Real Time Systems
- Advanced Computer Architecture
- System Design With Embedded Linux
- Embedded Systems And RTOS
- Embedded System Design & Architecture

UG

- Digital Circuits And Systems
- Computer Organization And Architecture
- Microprocessor And Microcontrlers
- Principles Of Embedded Systems
- Linear Integrated Circuits & Applications
- Advanced Microcontroller Applications
- Design Thinking

Research Profile

Publications

Scopus	https://www.scopus.com/freelookup/form/author.uri?st1=Prasad%20Reddy&st2=V%20H
ORCID	https://orcid.org/0000-0003-0417-3956
Publons	https://publons.com/researcher/3701778/rvh-prasad/
Research Ga	https://www.researchgate.net/profile/V_H_Prasad_Reddy
LinkedIn	https://www.linkedin.com/in/v-h-prasad-reddy-437b2763/

Funded Research Projects

Project Title 1	Electronic Toll Collection System
Role	Investigator
Sanctioned Agency	DST, TIFAC-CORE
Sanctioned Amount	Rs. 3.0/- Crores
Duration	2008-2014 , 6 Years
Contract No.	TIFAC/REACH/SEC/2007 dated 27.12.2007
Present Status	Completed Successfully and Submitted the Report

Project Title 2	Development, Validation and Porting of V.34 and V.90 MODEM Protocol Software on to the ANURAG Processor Based MODEM.
Role	Investigator
Sanctioned Agency	ANURAG, DRDL, DRDO
Sanctioned Amount	Rs. 9,90,000/- Lakhs
Duration	2014-2016 , 2 Years
Contract No.	ANURAG/MMG/CARS/2014-15/046 dated 21/11/2014
Present Status	Completed Successfully and Submitted the Report

Patents

Published	03 Application number: 202441044499 Title: Smart Solar Forecasting for Enhanced Irradiance And temperature Predictions of Photovoltaic Systems using Deep Learning Techniques Published on: 14/06/2024 Application number: 202341035297 Title: Artificial Intelligence Based Technique for Fault Alarms And Power Performance Analysis In Hybrid Electric Vehicles Based On Hydraulic Technology Published on: 16/06/2023 Application number: 202241006214 Title: A smart IoT based application to support and monitor bank accounts of an organization Published on: 11/02/2022
------------------	---

Administrative Roles

S.No.	Role	Institution	Duration	Responsibilities
1	IIC Dept coordinator	SAHE	2017- Present	Organizing the IIC activities
2	Patent Dept coordinator	SAHE	2014 - Present	Organizing the Patent related activities
3	Startup Coordinator	SAHE	2022 - Present	Motivating students towards start start-ups

Certifications/MOOC Courses Completed

S.No.	Title	Platform	Duration	Year
1.	eYnatre	IIT Bombay	8 Weeks	2024

Research Publications (SCI/ Scopus)

Journals:

1. **Reddy, VH Prasad**, and Puli Kishore Kumar. "FPGA enabled ECG signal reconstruction based on an enhanced orthogonal matching pursuit algorithm." **Integration 101 (2025): 102311. SCI & Scopus**
2. **Reddy V H Prasad**, and Puli Kishore Kumar. " FPGA Design of Compressive Sensing Reconstruction Based on Optimized OMP with Parallel LUT Based Sign Extended Multiplier and Multi-Operand Binary Tree Adder." **Journal of Circuits, Systems and Computers.**
3. Kumar, G.K., A Ravi Raja, **Reddy, V.H.P. et al.** Area-, Power-, and Delay-Optimized 2D FIR Filter Architecture for Image Processing Applications. **Circuits Syst Signal Process 42, 780–800, 2023. SCI & Scopus**

Book Chapter: (Scopus Indexed)

1. **Reddy, VH Prasad**, Gundugonti Kishore Kumar, and Puli Kishore Kumar. "Hardware architecture for denoising of EOG signal using a differential evolution algorithm." Smart Embedded Systems. **CRC Press, 2023. 21-32**

Conferences: (IEEE with Scopus)

1. Syed, Ashfaq Ahamad, Hemanth Keerthi, **VH Prasad Reddy**, and Ch VSA Eswar Bhatta. "Eye Fatigue Detection using Machine Learning and Deep Learning Classifiers." In 2024 MIT Art, Design and Technology School of Computing International Conference (MITADTSociCon), pp. 1-6. **IEEE, 2024.**
2. Mohammed Isshaad, T. Vishnu Vardhan Reddy, **VH Prasad Reddy** and M. Manashshe. "Development of a Real-Time Weight Monitoring System for Premature Infants". In 4th International Conference on Pervasive Computing and Social Networking, ICPCSN 2024, **IEEE, 2024.**
3. Hruday, Pemula Jaxa, Anakapalli Bharath Venkata Siva Kiran, and **VH Prasad Reddy**. "Horticulture Robot for Precision Plant Health Management." In 2024 10th International Conference on Communication and Signal Processing (ICCSP), pp. 448-452. **IEEE, 2024.**
4. Pothana, Nishmika, and **VH Prasad Reddy**. "Verification of Coverage-Driven and Assertion based AXI4 Protocol VIP using UVM." In 2023 First International Conference on Cyber Physical Systems, Power Electronics and Electric Vehicles (ICPEEV), pp. 1-7. **IEEE, 2023.**
5. Kavadana, Prasad, Shaik Fayaz Ahamed, Ravi Raja Akurathi, and **VH Prasad Reddy**. "Development of Lorawan Based Water Quality Monitoring System." In 2023 International Conference on Sustainable Emerging Innovations in Engineering and Technology (ICSEIET), pp. 715-718. **IEEE, 2023.**
6. Bhavitha, P., A. Ravi Raja, J. Harish, D. Anjali, **R. V. H. Prasad**, and Sridevi Dasam. "Precision Localization of Acoustic Beacons Using Active Sonar Systems: An In-Depth Analysis." In 2024 Fourth International Conference on Advances in Electrical, Computing,

Communication and Sustainable Technologies (ICAECT), pp. 1-7. **IEEE, 2024.**

7. **Reddy, VH Prasad**, A. Ravi Raja, Phani Kumar Polasi, Ravi Teja Ponnuri, Gundugonti Kishore Kumar, and Shaik Fayaz Ahamed. "Design and Development of Traffic Light Recognition method for Autonomous vehicles using V2I Communication." In 2023 3rd International conference on Artificial Intelligence and Signal Processing (AISP), pp. 1-6. **IEEE, 2023.**
8. Jogi, Kavaya Sri, and **R. V. H. Prasad**. "Detecting the Plant Species using Deep-Convolutional Neural Network (D-CNN) with Internet of Things (IoT)." In 2023 Third International Conference on Artificial Intelligence and Smart Energy (ICAIS), pp. 66-70. **IEEE, 2023.**
9. Datta, N. Lohita, Aafreen Tabassum, Jandhyam Bhaavani, K. Yaswanth Raj Kumar, **R. V. H. Prasad**, and A. Ravi Raja. "Design And Development of Dust Detection and Filtering System." In 2023 9th International Conference on Advanced Computing and Communication Systems (ICACCS), vol. 1, pp. 739-743. **IEEE, 2023.**
10. Soniya, V., K. Ravi Shankar, Sk Karishma, D. Vamsi, and **R. V. H. Prasad**. "IoT Based Smart Way of Watering Plants and Feeding Pets." In 2023 9th International Conference on Advanced Computing and Communication Systems (ICACCS), vol. 1, pp. 744-749. **IEEE, 2023.**
11. Jyothirmy, Sistla, Gottam Geethika, Seetha Bharath Sai, Buddhanti Saiteja, and **VH Prasad Reddy**. "Machine Learning Algorithms based Detection and Analysis of Stress-A Review." In 2023 Second International Conference on Electronics and Renewable Systems (ICEARS), pp. 1456-1463. **IEEE, 2023.**
12. **Reddy, VH Prasad**, and Puli Kishore Kumar. "Performance Comparison of OMP and IGE OMP with Various Measurement Matrices in Compressive Sensing." 2023 5th International Conference on Energy, Power and Environment: Towards Flexible Green Energy Technologies (ICEPE). **IEEE, 2023.**
13. R. Sivanageswararao, Sk. Fayaz Ahmad, **R.V.H Prasad** "Design and Development of VLSI Architecture for Implementing Sub-Nyquist ADC" **IEEE** 5th International Conference on Information and Communication Technology-2021(CICT-2021), CICT-2021 organized at IIITDM Kurnool
14. **V H Prasad Reddy**, Puli Kishore Kumar, "Performance Comparison of Orthogonal Matching Pursuit and Novel Incremental Gaussian Elimination OMP Reconstruction Algorithms for Compressive Sensing," **IEEE** International Conference on Microwaves, Antennas, Communications and Electronic Systems ,COMCAS- 2021, PP 410-415. COMCAS-2021 organized at **Tel Aviv, Israel**

Research Publications (Non - Scopus)

Journals:

1. Venkata Ratna Prabha K, Lavanya N, Sahithya K, M. Bhavani Prasad, A Ravi Raja and **V H Prasad Reddy**, " IOT Based Industry and Kitchen Monitoring and Controlling", International Journal of Advanced Science and Technology, Vol.29, No. 4, pg. 3660 -3670, 2020.

2. A Ravi Raja, **V H Prasad Reddy**, Dr. Sk Fayaz Ahamed, Dr. Phani Kumar Polasi, and Venkata Ratna Prabha K, “Development and validation of low cost, Wi-Fi integrated transponder as data logger for IoT based personal healthcare in smart zones”, International Journal of Advanced Science and Technology, Vol.29, No. 6, pg. 5419-5430, 2020.
3. K.V.S Siva Prasad, **R V H Prasad**, A. Anitha, Design and Implementation of Scalable Beam Steering Control System for Phased Array RADAR, International Journal of Innovative Technology and Exploring Engineering (IJITEE), July -2019.
4. **RVH Prasad**, Implementation of ITU-T V.34 High speed soft MODEM, International Journal of scientific research and engineering studies, 2016, Vol.3, Issue8, Aug

Prominent Awards and Recognitions

- Smart India Hackathon – 2022 Winners
- IIC – Yukthi Runner Up
- APSCHE Best Mentor
- NPTEL

Prominent Trainings (Certification Courses)

AICTE: Innovation Ambassador Training

AICTE-Texas Instruments: Best Training Mentor

UiPath: Diploma of Completion of Level-2 Orchestrator 2018.3 Training

UiPath: Diploma of Completion of RPA Starter Training

Professional Development Activities – Participations (latest only)

Faculty Development and Training Programmes	20
Various no. of Seminars/ Workshops/ Webinars/ Guest Lectures	20



(R V H PRASAD)