

Name: **HELAN SATISH**  
 Designation: Assistant Professor  
 Department: E.C.E  
 Mail.I.D: helan\_satish@vnrvjiet.in  
 Experience (in years): 15  
 Research: 5



### 1. Educational / Technical qualifications:

| S.No | Level (UG / PG / Ph.D) | Year of passing | Specialization         |
|------|------------------------|-----------------|------------------------|
| 1    | Ph.D                   | Pursuing        | Biomedical Engineering |
| 2    | M.E                    | 2006            | Applied Electronics    |
| 3    | B.E                    | 2004            | E.C.E                  |

### 2. Teaching and Learning:

- 2.1. Teaching Interests: CS,SS, Biomedical Engineering, EDC, LDIC, ERTOS, DIP
- 2.2. Novel Teaching & Learning Techniques adopted: Chalk and talk, WIT and WIL, POGIL, Lab Protocol, Group Discussion, Open Notebook test.
- 2.3. Involvement in curriculum updating / Design: yes

### 3. Co-curricular and Extra-Curricular Activities

- 3.1. Interests and Hobbies:
- 3.2. CCA/ECA Organized: Coordinator for VJ Teatro
- 3.3. CCA/ECA participated: Involved in Intramurals and Sintillashunz
- 3.4. Counseling and Mentoring Activity: As mentor for 10 students from each year of ECE.
- 3.5. Committees involved in:  
 Department level: Result Analysis In-charge, EDC Lab In-charge, Prepared Embedded C Lab Protocol, Anti Ragging, Prepared EDC Lab Manual, AQAR 2020-2021 Department Coordinator, ECE Newsletter (ELECTROCOMM-IN-VISION).  
 Institute Level: Stock Verification, Academic Audit, VJ Teatro Faculty Coordinator, Event Scheduling and Conduction Committee for Sports Fest, Cultural Day and Annual Day AY2021-22.

### 4. Conference / Workshop / Seminar / Guest Lectures:

- 4.1 Conducted:-
- 4.2 Attended:
  - A Short Term Training Program on Real Time Signal Processing & Image Processing of 2 weeks at VNR VJIET during June 2011. Sponsored by AICTE.
  - FDP on ARM Processors in Sept 2013.
  - Workshop on Texas Analog design in Oct 2013.
  - Two days TEQIP Sponsored workshop on "PCB designing of electronic circuits" in VNR Vignana Jyothi Institute of Engineering & Technology, Hyderabad from 22<sup>nd</sup> & 23<sup>rd</sup> FEB 2013.
  - FDP on CLOUD COMPUTING Feb 2013.
  - 2 week AICTE Sponsored Workshop on "Trends in Wireless communication and Evolution of Simulation tools" conducted from 11th May to 23rd May 2015.
  - 2 day workshop on "POGIL FOR OUTCOME BASED EDUCATION" on Dec 2014.
  - Workshop on Real time systems
  - Workshop on LABVIEW in 2015
  - Workshop on MATLAB in 2015
  - Seminar on Image Fusion techniques in 2016 (27.01.2016)
  - FDP on Trends in Image and Video Processing (MGIT) in 2016 from 22-27 February
  - FDP on Molecular Modelling and In-silico Drug Designing." from 23/08/2021 to 27/08/2021 at St.Joseph's College of Engineering.

- FDP on "Computers and Automation in Life-Sciences Based Research" from 30/08/2021 to 03/09/2021 at Institute of Chemical Technology.
- FDP on "Computing Constructs for Modelling Biology" from 04/10/2021 to 08/10/2021 at JNN College of Engineering.

## 5. Academic Contribution and Research & Consultancy:

5.1. Invited Lectures:-

5.2. Articles/Chapters published in Books:

1. Reentry in cardiac ventricular epicardial tissue due to SCN5A L812Q gene mutation: a computational study, Biomedical Physics & Engineering Express, [10.1088/2057-1976/ac605c](https://doi.org/10.1088/2057-1976/ac605c)
2. A Simulation Study on Propagation of Action Potential in Epicardial Tissue Due to SCN5A L812Q Gene Mutation, Recent Advances in Applied Mechanics, [10.1007/978-981-16-9539-1\\_4](https://doi.org/10.1007/978-981-16-9539-1_4)

5.3. Books published as single author or as editor:-

5.4. Projects Guided:

- a) UG: 10
- b) PG: 6

5.5. Research Interests: Biomedical Engineering

5.6. Ph.D students:

- a) Enrolled:
- b) Submitted:
- c) Awarded:

5.7. Papers published in reviewed Journals:

| S.No | Title of the Paper  | Journal Name<br>Vol.No. PP   | ISBN/ISSN<br>No.   | Impact<br>Factor/<br>Citation<br>Index | National/<br>International |
|------|---|--|--|--|----------------------------|
| 1    | An Improved Inverter Based Double-Tail Comparator for Ultra Low-Voltage Circuits                            | International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol. 4, No8 | ISSN (Print) : 2320 – 3765<br>ISSN (Online): 2278 – 8875 |  | International              |
| 2    | Reentry in cardiac ventricular epicardial tissue due to SCN5A L812Q gene mutation: a computational study    | Biomedical Physics & Engineering Express   | Online ISSN: 2057-1976                                   |  | International              |
| 3    | A Simulation Study on Propagation of Action Potential in Epicardial Tissue Due to SCN5A L812Q Gene Mutation | Recent Advances in Applied Mechanics   | Online ISBN978-981-16-9539-1                             |  |                            |

5.8. Papers presented at National / International **conferences**:

| S.No | Title of the Paper  | Names of the Conference/ Seminars  | National/ International | Period |
|------|---|--|-------------------------|--------|
| 1    | Secret Key Estimation In Sequential Steganography   | AICTE Sponsored  | National                | 2006   |
| 2    | Computational Study of SCN5A L812Q Gene Mutation in Epicardial Cells                                    | 2020 IEEE-EMBS Conference on Biomedical Engineering and Sciences (IECBES)                              | International           | 2021   |
| 3    | A Simulation Study on Electrical Activity of Ventricular Endocardial Tissue due to SCN5A L812Q Mutation | 2021 43rd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC) | International           | 2021   |

5.9. Sponsored research Projects: Nil

5.10 Consultancy Projects: Nil

**6. Awards / Honors received:-**

**7. Motto:** There is no substitute for hard work. Aim high.