
Jyothsna S

Department of Electrical Engineering, Indian Institute of Technology Palakkad,
Kanjikode West, Palakkad - 678623
Mob: +91-7754856678 | E-mail: 122104001@smail.iitpkd.ac.in

ACADEMIC PROFILE

PhD Student, Indian Institute of Technology, Palakkad

JANUARY 2021 - (Present) | CGPA - **10.0**

- Date of Joining: 18-Jan 2021
- Date of Graduation (Tentative): 31-Dec 2024
- Advisor: Dr. Lakshmi Narasimhan Theagarajan
- Thesis Title: Transceiver design for secure communication in 6G networks

M.Tech (Signal Processing and Communication) , IIT Kanpur

AUGUST 2013 - JUNE 2015 | CGPA - **9.25 (GATE Rank: 328)**

B.Tech (Electronics and Communication), Amrita School of Engineering, Kollam

AUGUST 2009 - JUNE 2013 | CGPA - **9.82 (Gold Medallist)**

All India Senior School Certificate Examination (12th STD, CBSE)

2009 | Good Shepherd Public School, Changanassery | 94.6%

All India Senior School Examination (10th STD, CBSE)

2007 | St. John's School, Nedumkunnam | 95.8%

AWARDS AND RECOGNITIONS

- **All India Rank of 328** in **GATE** (EC) 2013
- **First Rank with Gold Medal** (2013) **in B.E** at Amrita University
- One of the 8 engineers (out of >100) to be chosen under the **Engineering and Technology Leadership Program (ETLP)** at Eaton Corporation, Pune.
- Winner (team of 5) of The Khoj Sustainable Lighting Solution Competition at Eaton
- District-level Winner of Swadeshi Sastrapratibha Contest

WORK EXPERIENCE

Project Staff, Indian Institute of Technology, Palakkad

JUNE 2020 - DECEMBER 2020

- Principal Investigator of the Project: Dr. Lakshmi Narasimhan Theagarajan

Eaton Corporation, Pune - *ETLP Engineer*

JULY 2015 - APRIL 2017

- Worked with the Electrical Product Group, and Corporate Research Team as part of its prestigious Engineering and Technology Leadership Program (ETLP)
- Built proof-of-concepts and initial prototypes of their future products

PROJECTS

Video Streaming over Visible Light Communication (VLC), Eaton

AUGUST 2016 to APRIL 2017

- Redesigned VLC receiver to increase transmission rate from 20kbps to 1 Mbps.
- Implemented audio-video streaming over this VLC link through progressive downloads

String Monitoring Unit for Photovoltaic (PV) Combiner Box, Eaton

AUGUST 2015 to AUGUST 2016

- Developed a Monitoring Unit using a novel technique to measure current generated by a string of PV cells.
- Responsible for algorithm, implementation, testing, and firmware development.

Generalized Likelihood Ratio Test (GLRT) Based Target Detection in MIMO Radars, IIT Kanpur

MAY 2014 to APRIL 2015

- Derived a GLRT-based test statistics to detect targets where scattering scene co-efficients are estimated using Maximum Likelihood.
- Achieved superior performance when compared to the performance of the state-of-the-art energy detectors.
- Extended the proposed technique to also detect moving targets.

Other notable projects

- Program to control the color of LED lamps in real-time (IIT Kanpur)
- Temperature display on a seven-segment LCD using a DS1620 temperature sensor and PIC16F877A (Amrita School of Engineering)

DECLARATION

I hereby declare that all the information contained in this resume is in accordance with facts or truths to my knowledge. I take full responsibility for the correctness of the said information.

PLACE: PALAKKAD

DATE: 15-January 2022

JYOTHSNA S