

## AREAS OF INTEREST

- Communication Systems
- Digital Signal Processing
- Error Correcting Codes
- Information Theory
- Wireless Communication
- Software Defined Radio

## TECHNICAL SKILLS

- **Softwares Skills:** GNU Radio
- **Programming Skills:** C, C++, Python
- **Hardware Platforms:** USRP, RTL SDR

## WORK EXPERIENCE

- **Graduate Engineering Trainee ( C & I ), Adani Power Limited** (July 2010-January 2011)
- **Senior Engineer ( C & I ), Adani Power Limited** (January 2011-July 2011)

## PROJECTS AND SEMINARS

- **M.Tech. Project: Application of LDPC codes to Multiuser Communications** (July 2013-Present)  
**Guide** - Prof. Sibiraj B Pillai, IIT Bombay.  
LDPC codes are a class of linear error correcting codes characterized by a sparse parity check matrices. We study the current LDPC encoding and decoding algorithms and extend them to multiuser scenario. GNU Radio blocks for encoder and decoder are developed.
- **Google Summer of Code, 2013: LDPC codes and more FEC in GNU Radio** (June 2013-Present)  
**Mentor** - Dr.-Ing. Jens Elsnar, CEL, KIT.  
This project aims to develop generic encoders and decoders for LDPC Codes and other FEC schemes currently not available in GNU Radio.
- **M.Tech. Seminar: Resource allocation in Wireless Networks** (Nov. 2011)  
**Guide** - Prof. Sibiraj B Pillai, IIT Bombay.  
We studied various power allocation schemes in a wireless network in an Information Theoretic setup
- **Industrial Training: BSNL Kerala Circle** (May 2008 - June 2008)  
Various aspects of GSM Architecture were studied. Specifically, training on OMC Radio, OMC Switch, Radio Planning and BSS were obtained

## COURSE WORK

- Communication Systems
- Error Correcting Codes
- Information Theory
- Digital Message Transmission
- Digital Signal Processing
- Wireless Communication
- Statistical Signal Analysis
- Applications of Linear Algebra
- Markov chains and Queuing Systems
- Optimization Techniques

## ACHIEVEMENTS

- Our team secured a spot in the finals of **DARPA Spectrum Challenge**.
- **Best outgoing student** of the year 2004 in JNV Malampuzha.

## HOBBIES

- Reading, coding, music and movies.