SPCRC : Signal Processing and Communications

SPCRC : Summary

- Research Areas
  - Signal Processing
  - Communication theory
  - Coding Theory & Information Theory
  - IoT
- Funded projects
- Collaborations
- Publications

Funded Projects

- Compressive Sensing
- Distributed Storage
- Smart Cities
- IoT

Collaborations

- Lund University
- UC San Diego
- Purdue University
- LAAS-CNRS
- University of Bristol

Select Publications

Signal Processing

Coding Theory and Information Theory

Communications and IoT

Faculty Profiles

- Dr. Santosh Nannuru
  - Signal processing
  - Graph signal processing
  - Data transmission reduction
  - Occupancy detection

- Dr. Prasad Krishnan, Dr. V. Lalitha, Dr. Arti Yardi
  - Codes for distributed computing:
    - Mitigating the effect of stragglers in distributed gradient computation
    - Codes for DC from Combinatorial Designs and other Combinatorial Structures
    - Codes for Content Delivery
    - Coded Transmission schemes for Broadcast News with Caches
    - Private Information Retrieval
  - Codes for DNA Data Storage

- Dr. Praful Mankar, Dr. Sachin Chaudhari
  - Cellular Internet-of-things Networks
  - SP and ML for IoT
  - Data transmission reduction
  - Occupancy detection

- Dr. Uballinda, Dr. Praful Mankar, Dr. Arti Yardi, Dr. Sachin Chaudhari
  - Wireless: Cellular and Beyond
  - Wireless Information and Energy Transfer
  - Non-orthogonal Multiple Access
  - Modelling and Analysis of Modern Cellular Networks using Stochastic Geometry
  - UAV & RS enabled Cellular Comm

- Dr. Prasad Krishnan, Dr. V. Lalitha, Dr. Arti Yardi
  - Codes for distributed computing:
    - Mitigating the effect of stragglers in distributed gradient computation
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