### YELLEPEDDI ATULYA

B.Tech Electronics & Communication

**Engineering** 

**UG (IV Year I Semester)** 

**Registration No**: BT/EC/060278/10 **E-mail ID**: atulya1988@gmail.com



**Area(s) Of Interest:** Signal Processing, RF and Millimeter Wave Systems, Algorithms, Algorithm Parallelization, Programmable Logic Devices, Design on PLDs and FPGAs

Educational Qualifications	Year	Board/Institution	CGPA*/ %
UG ( III Year II Semester )	2009	Indian Institute of Technology, Roorkee	9.611
Twelfth Class	2006	D.A.V. Boys Senior Secondary School, Gopalapuram, Chennai, Tamilnadu	97.400
Tenth Class	2004	N. St. Mathews Public School, Patamata, Vijayawada, A.P.	94.600

<sup>\*</sup>GPA on a scale of 10

#### INTERNSHIP

Institut fur Hochfrequenztecknik und Elekronik, Karlsruhe University, Karlsruhe, Germany Design and Analysis of a Substrate Integrated Millimeter Wave Antenna System (May 17, 2009 to July 25,2009)

Worked in the area of antenna design and optimization. Performed the numerical and computer-based investigation of a substrate-integrated waveguide-antenna system for a high-precision radar sensor in the millimeter wave region. Both theoritical and practical tasks were performed.

# **PROJECTS**

### **IIT Roorkee**

**B.Tech Project on Geometric Source Separation of Sounds Using Microphone Arrays** ( July 2009-current )

This project is currently being pursued under the guidance of Dr. D.K. Mehra, Professor, Department of Electronics and Communication Engineering as part of the requirement for the B.Tech Degree. The goal of this project is to use a combination of Blind Source Separation and Microphone Arrays with Beamforming to suitably re-extract original speech signals from mixed signals obtained at the output of microphone receivers.

#### **IIT Roorkee**

Implementation of a Data-Mining Algorithm for a Network Intrusion Detection System on a FPGA ( May 2007 to July 2007 )

The goal of this project was to implement k-means clustering on network flow sets, and use the results for network intrusion detection. The system was parallelized to allow for efficient classification and long term learning, and this was implemented on an FPGA. The FPGA used was a Xilinx Virtex-5 Series Device and the entire kit was programmed on VHDL

### **IIT Roorkee**

**Design of a T.E.M. Horn Antenna** (August 2009 - Present)

This project involves the design of a TEM Horn Antenna for a Radar Imaging Application. HFSS and Matlab are being used for the simulation part, and the antenna is part of a larger imaging system.

#### **SKILLS**

Computer Languages: C++, Java, Visual Basic, PHP, Javascript

Software Packages: Matlab, CST Studio Suite, Xilinx ISE and EDK, ModelSim

Academic Achievements: Current Institute Rank is 2 and Department Rank is 1. Was

awarded a merit certificate in English by the CBSE in AISSE 2004 (Standard 10) (top 0.1% of examinees). Also achieved Merit Certificates in Physics, Chemistry and Computer Science in the CBSE AISSCE 2006 (Standard 12) (top 0.1% of examinees). National Finalist at the INOI (Indian National Olympiad in Informatics), 2005. Attended the Indian National Olympiad in Informatics final selection camp in Bangalore.

Was selected again for the same in 2006.

Additional Courses Taken: Digital Signal Processing, Digital Design, Electronics,

Economics, Business Management, C++, Data Structures, OOP Lab, Computer Networks, Automatic Control Systems, Communication Systems, Digital Communication Systems English (S/R/W); Hindi (S/R/W); Telugu (S); Tamil (S);

French (S/R/W);

Languages Known:

## **EXTRA CURRICULARS**

School Pupil Leader, St. Mathews Public School ( 2004 )

**Best Outgoing Student** 

Music Section, Cultural Council, IIT Roorkee (2006-09)

Secretary

Convergence, Centerstage Event at Cognizance (2007)

Coordinator

Watch Out, Students' News Magazine, IIT Roorkee ( 2006-09 )

**Executive Editor** 

Sargam, Music Fest at Thomso (2008)

First, Instrumental Solo

Lord of the Bytes, Cognizance (2007)

Third Place

**Bournvita Quiz Contest (2003)** 

All Asia Quarterfinals

## **PERSONAL DETAILS**

Fathers name: Yellepeddi Ramakrishna Date of Birth: 06-10-1988

Gender: Male Category: General

Permanent Address: No. 15 Besant Road Royapettah Chennai 600014
Present Address: No. 15 Besant Road Royapettah Chennai, TamilNadu

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### **REFERENCES**

Dr. A. Swaminathan Assistant Professor Indian Institute of Technology Roorkee

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