## **Abhinav Moudgil**

OBH 87, Palash Nivas, IIIT-Hyderabad, Gachibowli, Hyderabad 500032, India abhinavmoudgil95@gmail.com • +91 8886330996 • github.com/abhinavmoudgil95

**EDUCATION** International Institute of Information Technology, Hyderabad, India

B.Tech and M.S. in Electronics and Communication Engineering

Aug 2013 - Jul 2018

· Adviser: Prof. P J Narayanan, Director, IIIT-H

• Research areas: Computer vision, Machine Learning.

• Cumulative GPA: 7.96 / 10.0 (4 semesters)

**INTERESTS** Machine Learning, Data Mining, Computer Vision, Algorithms

**EXPERIENCE International Institute of Information Technology**, Hyderabad Aug 2015 – Dec 2015

Teaching Assistant | Course: Science 1

Center of Visual Information Technology, IIIT Hyderabad May 2015 – Present

Undergraduate Researcher

Robosapiens Technology, Nov 2014 - Dec 2014

Winter Trainee | Robotics and Embedded C

**PROJECTS Intrusion Detection System** 

Sep 2015 – Dec 2015 Course: Statistical Methods in AI (CSE471)

· Aims to detect malicious attacks in network from logs.

• Used classification models: SVM, Neural Network, Decision trees, Ensembling to build the classifier.

• Implemented *fast feature reduction* technique to significantly reduce execution time.

• Performance analysis on KDD CUP 1999 and HTTP CSIC 2010 dataset.

**Multi-Camera Synchronization** 

Jun 2015 - Dec 2015

Honours Project I

Synchronized multiple phones under same wireless network within 10ms using GPS.

• Manual control of camera parameters using new Android Camera 2 API.

• Explored the ongoing research and studied various research papers in this field.

16 Bit Simple Processor

Aug 2014 – Dec 2014

2009

Course: Electronics Workshop 2 (ECE291)

• Implemented 8 basic instructions like mov, add, branch, compare etc.

· Design consisting of 8 registers, ALU and FSM control unit.

· Coded in Verilog and tested on Spartan 3E FGPA.

• Timing diagram analysis using Xilinx ChipScope Pro software.

Jan 2014 - Apr 2014 **Mobile Controlled Robot** 

Course: Electronics Workshop 1 (IEC104)

• Built a GSM Mobile Controlled Robot using basic logic circuit and DTMF Decoder.

**ACADEMIC HONORS** & AWARDS

National Talent Search Examination, NCERT Delhi

Shortlisted among top 0.01% high school students from all over India.

O(logN) Programmer, HackerRank

2014 Handle: codeaholics, Current Rating: 2488

National Science Olympiad, Science Olympiad Foundation (SOF) 2010

Secured All India Rank 196 out of 45k+ participants in final round.

**TECHNICAL SKILLS** 

Languages (Proficient): C, C++(with STL), MATLAB, Python, Verilog

**Operating Systems:** OS X, GNU/Linux, Windows

Softwares: Xilinx ISE Design Webpack, Altera ModelSim, NI Multisim, AVR

Tools/Libraries: Numpy, Scikit, Git, Bash, Vim, LATEX

**COURSEWORK** Artificial Neural Networks\*, Statistical Methods in AI, Digital Image Processing, Computer

Programming, Data Structures, Mathematics I, II, Probability and Random Processes, Computer System Organization, Digital Logic and Design, IT Workshop I, Science 1, Digital Signal Processing,

Signal and Systems, Embedded Hardware Design, Electronics Workshop I, II