

Pratik Bhangale

Pre-Final Year Undergrad
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EDUCATION

IIT KANPUR

B. TECH. IN COMPUTER SCIENCE

Expected completion: Jul '18

CPI: 7.1/10

TANWANI JUNIOR COLLEGE

TWELFTH GRADE

Grad. May '14 | Maharashtra Board

Percentage: 87.54%

TANWANI ENGLISH SCHOOL

TENTH GRADE

Grad. May '12 | Maharashtra Board

Percentage: 98.00%

SKILLS

PROGRAMMING:

• C / C++ • Verilog • Python • HTML
• Bash • CSS • PHP • SQL

TOOLS:

• MATLAB • Arduino • Autodesk
Inventor • Altium PCB designer
• LATEX

OPERATING SYSTEMS:

• Linux(Ubuntu) • Windows

COURSEWORK

- Data Structures & Algorithms
- Computer Organisation
- Introduction To Electronics
- Discrete Mathematics
- Introduction To Electrical Engineering

LAB COURSES

- Computing Laboratory
- Electronics Lab
- Electrical Engineering Lab

INTERESTS

- FPGAs
- Machine Learning
- Robotics

ACADEMIC ACHIEVEMENTS

- Secured All India Rank 1101 in JEE (advanced) 2015 out of 135,000 students
- Cleared JEE Mains 2015 with percentile 99.98 out of 1,300,000 students
- Recipient of Kishor Vaigyanik Protsahan Yojana (KVPY) scholarship since 2014 by Indian Institute Science
- Appeared in Indian National Chemistry Olympiad 2014 among top 300 students all over the India
- Recipient of National Talent Search Examination (NTSE) scholarship since 2010 by NCERT

PROJECTS

OPTIMISATION OF DEEP WALK ALGORITHM

Prof. Piyush Rai | IITK

May '16 - present

- Studied Deep walk algorithm as Matrix factorization and proposed an optimisation on standard algorithm by adding an extra feature matrix term in cost function over low rank matrix factorisation
- Implemented Probabilistic model of SVM using EM algorithm

ABU ROBOCON '16

Prof. Bhaskar Dasgupta | IITK

Sept '15 - Mar '16

- Designed & fabricated one autonomous and one semi-autonomous robots which could complete tasks like pole climbing, object placing, line and wall following to participate in ABU Robocon 2016 competition
- Secured Second Runner Up place among 105 colleges participating all over the India

FPGA BASED AUDIO MIXER

Electronics Club | IITK

May '15 - June '16

- Developed an Audio Mixer device using FPGA taking Audio signal as input and producing different sound effects like Echo, Pitch change, etc.
- Worked on parallel processing, serial communication (SPI) on Spartan 6 MOJO FPGA, using Verilog as Hardware Description Language

MINI PROJECTS

- Sylvester Gallai Theorem & Crossing Lemma in Course of Discrete Mathematics
- Shooting Game in Electromania Event of Techkriti'15, IITK | Won 1st prize

POSITIONS OF RESPONSIBILITIES

COORDINATOR, ELECTRONICS CLUB IITK

March '16 - Present

- Conducted lecture series and workshop to introduce campus community to several hardwares like Micro-controllers, FPGAs, Sensors, etc.
- Mentored six Summer Projects under Electronic Club in Summer '16
- Raised fund and Initiated the use Printed Circuit Boards & new fabrication methods like Waterjet Cutting.

SUB-HEAD, TEAM ROBOCON IITK

Sept '15 - March '16

- Co-ordinated a Team of 10 juniors to create autonomous & semi-autonomous robots
- Organized Mini-projects and Introductory lectures on PCB designing, Micro-controllers and Electronic Sensors