Nicho Priyatham

Engineering Physics

Indian Institute of Technology Bombay

Specialization: Nanoscience

15D260010

UG Third Year (Dual Degree)

Male

DOB: 17-Jan-1997

TECHNICAL PROJECTS

- **Machine Learning | Compututional Condensed Matter**   [Dec'17-present]
  Supervised learning project; Guided by – Prof. Soumya Bera
    - Covered topics in supervised learning which include polynomial regression,**logistic regression,neural network** and applied this topics to generate **Boltzmann machine**
    - Solved problems related to clustering of the given data using **K-Means algorithm**

- **Technology Mapping | Tree Covering In Python**   [Oct'17-Nov'17]
  Course project; Guided by – Prof. Sachin Patkar
    - Generated an algorithm that finds all possible coverings of a pattern tree library (with symmetric and unsymmetrical pattern trees) over a given input subject tree
    - Given cost to each pattern,found the tree covering with **minimum cost** using **dynamic programming**.

- **Implementation on FPGA | Piplined Microprocessers**   [June'17-July'17]
  Summer project; Guided by – Prof. Sachin Patkar
    - Worked on **6-stage** pipelined implementation of a RISC microprocessor
    - **Implemented its VHDL code** on FPGA and tested it using a 7 segment display

- **Implementation on FPGA | Random Prime Number Genrator**   [Feb'17-April'17]
  Course Project; Guided by – Prof. Pradeep Sarin
    - **Coded Rabin Miller** algorithm in VHDL to generate random prime numbers up **1024-bit**
    - Performed FPGA implementation to output 32-bit prime number on LED array
    - Attempted to display the output on VGA monitor and 16x2 charecter LCD display
    - Was Awarded AA Grade for impressive work

- **Data Analysis and Interpretation | Linear Regression In Python**   [April'16-Jan'17]
  Course Project; Guided by – Prof. Vikram Rentala
    - Performed mathematical operations on columns with more than 50,000 elements, generated sample space for this data with selected rows.
    - Ploted Histograms, Error bar diagrams, Contour using Matplotlib
    - Developed Linear and Polynomial regression by **minimizing χ^2 estimate**

- **Computer Programming | Polynomial Solver**   [Oct'15-Nov'15]
  Course Project; Guided by –Prof. Varsha Apte
    - **Designed a data structure** to represent polynomials and implemented functions which could add, subtract, multiply, divide and also differentiate and integrate polynomials
    - Developed algorithms to find **two roots** and **generate graph** of given polynomial function

TECHNICAL SKILLS

Languages :C++, Python, VHDL

Softwares and Tools: LaTeX, OriginLab, Quaters, ModelSim

PROFESSIONAL EXPERIENCES

- **Marketing and Business Develompent | Tinystep**   [May'17-June'17]
  India's largest parenting social network platform
    - **Interacted with key B2B executives** of leading corporates through cold-calling and presentation to establish new marketing deals
    - Assisted senior executives in evolve high **impact strategies** and designed **marketing proposals** by analyzing the target audience of the leads generated through cold-calling
    - Developed one-page **final report** of the online campaigns executed by the firm

  Result: Was part of a team that raised a revenue of over **2.5 million** Rupees
  Was **awarded bonus stipend** that was promised on extraordinary performance
- **Management Trainee | iB Hubs**   [December'16]
  PAN India Startup Hub which has already acquired a space of 1,50,000+ sq.ft.
    - Studied **basic corporate finance** concepts and prepared a concise report for entrepreneurs
    - Designed an **abstract model** to scale up an NGO (Make the world wonderful) across the complete country.
    - Attended a workshop on **Business model canvas** (BCM).

LEADERSHIP AND ORGANISATIONAL SKILLS

- **Coordinator | Mood Indigo 2016**   [April'16-Dec'16]
  Asia's largest college cultural festival; 131,000 footfall with over 210 events
    - **Media and Publicity**: Negotiated deals with Photographers and media houses for promotion of Multi-City events.
        * Developed press releases and jingles of Mood Indigo events for leading newspapers and radio stations respectively as a part of publicity campaign.
        * Was part of a team that conducted publicity events in 60 different colleges in Mumbai.
    - **Horizons | Humor Fest'16**: Coordinated with leading standup comedians and negotiated with them to minimize their professional fee.
        * Organized 4 standup comedy shows in venues with capacity varying from 600 to 3000.
        * Lead a group of 20 organizers who were responsible for various activities in Humor Fest.
- **Coordinator - Media | E-Cell,IIT Bombay**   [April'16-Jan'17]
  The Entrepreneurship Cell of IIT Bombay
    - Coordinated with title sponsors of E-summit in carrying operations pertaining to that deal
    - Researched and wrote article on fashion startups in India, which was published in EnSpace magazine that is distributed to over 1500 undergraduate and postgraduate freshman of IIT
    - Wrote 2 articles on EnSpace blog which got over 75,000 views in total
- **Literary Arts Secretary | Hostel 2, IIT Bombay**   [April'16-Jan'17]
    - Monitored hostel representation in Institute level literary competitions and achieved increment in participation of hostel these cultural events
    - Responsible for maintenance and renovation of hostel library which consists over 200 books

SCHOLASTIC ACHIEVEMENTS

- Secured **Top 1 percentile** score in JEE Mains among **1.3 million** students   [15']
- Secured a Rank within **Top 1 percent (out of 0.4 million) students** in Telangana EAMCET   [15']

STRENGTHS

- Good Estimating and Analysing Skills; Tolerance: Stress tolerance, Flexibility and Adaptability

RELEVANT COURSES

- **Theory:** Foundation of VLSI CAD, Digital System, Data analysis and Interpretation, Introduction to Numerical Analysis, Quantum Mechenics-II, Non-Linear Dynamics, Classical Mechanics
- **Lab:** Electronics Lab (Microprocessors), Electronics Lab(Digital Electronics), Genral Physics Lab