Pursuing Minor in Computer Science & Engineering

SCHOLASTIC ACHIEVEMENTS

• Secured 99.66% percentile in JEE Main among 1.1 million candidates	(2020)
--	--------

- Secured 99.71% percentile in GUJ-CET among 125 thousand candidates (2020)
- Achieved 7th rank with a percentile of 99.93% in SSC Gujarat Board (2018)
- Scored 99.75% percentile in Science Theory in HSC Gujarat Board (2020)

EXPERIENCE

Buddingo | Front-end Web Developer

(Summer 2022)

- Developed user interfaces with Angular JS, Bootstrap, HTML5, and CSS3, which improved user satisfaction
- Explored multiple threading, concurrency, design patterns, and their impacts on application concurrency
- Designed and developed dynamic web pages with the help of Angular JS

Digipplus | Math Subject Expert

(Winter 2021)

• Prepared handwritten solutions for Basic JEE mathematics questions and also typeset using IATEX

KEY PROJECTS

Jarvis (2021)

Institute Technical Summer Project (ITSP)

(Institute Technical Council, IIT Bombay)

- Developed a bot using Arduino IDE, having manual control through our Jarvis Mobile App
- Equipped bot with an HC-SR04 ultrasonic distance sensor to detect an object in the forward direction
- Future plans include making the bot completely autonomous by Machine Learning design models and AI

Sudoku Solver (Spring 2022)

Self-project

(Data Structures and Algorithms)

- Developed a 9x9 Sudoku solver from scratch in C++ using backtracking and recursion
- Program reads input either from a user or from a file containing the sudoku values and solves the puzzle

Arithmetic Logic Unit Design | Microprocessor

(Spring 2022)

Guide: Prof. Virendra Singh

(Course Project)

- Synthesized VHDL code for 16-bit ALU, capable of carrying out 4 operations: addition, subtraction, bitwise-NAND, bitwise-XOR, along with carry and zero flags for two input signals
- Generated Digital Waveforms of the output of RTL simulation in Quartus for a coded testbench

Sequence Generator | Digital Circuits Lab

(Autumn 2021)

Guide: Prof. Maryam Shojaei Baghini

(Course Project)

- Designed a Sequence Generator using both the structural and behavioural style of VHDL
- Modelled a circuit using flipflops and K-maps along with boolean algebra to optimise it
- Tested the correctness of the circuit using Scanchain by dumping svf file on CPLD

Positions of Responsibility

Marketing Coordinator | Entrepreneurship Cell, IIT Bombay

(2021)

Asia's Largest Entrepreneurship promoting student body recognised by NEN, Patronage from UNESCO

- Worked in a 20-membered team, ideated the deliverables to fit in the online ecosystem
- Explored strategic associations with high-ranking corporates in the sector assigned
- Successfully handled over 20+ associates professionals coming to IIT BOMBAY for E-cell events
- Maintained databases of over 100+ companies in different sectors and acted as the point of contact(POC)
- Approached 30+ companies over 70+ emails and contacted 100+ professionals for sponsorship
- Ideated multiple publicity campaigns to increase the reach of Eureka, Asia's largest B-model competition

Event Coordinator | Techfest | IIT Bombay

(2021)

Asia's largest science and technological festival with an annual footfall of 175,000+ from colleges all over India

• Promoted betterment of Differently Abled individuals through 100+ awareness sessions by associating with 15+ prominent international NGOs to provide them jobs under the initiative SAKSHAM

KEY COURSES UNDERTAKEN

Electrical Signal Processing, Digital Systems, Microprocessors, Control Systems,

Power Engineering, Analog Circuits, Electronic Devices and Circuits,

Communication Systems - I[†], EM Waves[†]

Labs Digital Circuits Lab, Microprocessors Lab, Analog Lab, Power Engineering Lab,

Control Systems Lab[†], Electronic Device Lab[†], Communication Lab[†]

Computer Science Automata theory, Computer Programming and Utilization

Basic Science Basics of Electricity Magnetism, Calculus, Linear Algebra, Differential Equations,

Complex Analysis, Quantum Physics and Application,

TECHNICAL SKILLS

†to be completed by November 2022

Languages(Proficient) C++, HTML, CSS, Javascript, LATEX

Languages (Novice) Python, Java

Frameworks & Libraries Angular JS, Bootstrap, NumPy, pandas

Software Git, MATLAB, Ngspice, Quartus, GNU Radio, keil μ vision, AutoCAD, Atmel Flip

Hardware Arduino, VHDL, 8086 Assembly, Pt-51, Krypton

EXTRACURRICULARS

Technical • Solved 100+ questions on InterviewBit and 70+ questions on Coding Ninjas on DSA

Social Volunteer

• Completed 80+ hours of volunteering service in the Green Campus Department of National

Service Scheme (NSS), IIT Bombay

Hobbies

• Competitive Programming

 $rac{ ext{and}}{ ext{Interests}}$

• Fascinated in Stock market and attended multiple seminars on Wealth creation by Stock Market

ullet Engaged in listening to audiobooks and have listened to 30+ audiobooks

• Learning guitar(Intermediate)