



Sirigudi Meghana
Computer Science & Engineering
Indian Institute of Technology Bombay

200050135
B.Tech.
Gender: Female
DOB: 31/8/2002

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2024	
Intermediate	CBSE	Nalanda Academy	2020	95.00%
Matriculation	CBSE	Narayana Concept School	2018	89.80%

SCHOLASTIC ACHIEVEMENTS

- Awarded **Best in Observation** in Orientation cum Selection Camp for **International Astronomy Olympiad 2017** conducted by National Council of Science Museums, India among **21** candidates (2017)
- Qualified for **Indian National Mathematics Olympiad (INMO)**, conducted by HBCSE, out of over **15000** candidates (2016-18)
- Scored superscore of **1560/1600** in **SAT** and **800/800** in Maths level 2, Physics, Chemistry **SAT Subject Tests** conducted by CollegeBoard (2019)
- Diploma winner** of **41st International Tournament of Towns (TOT)** from India in Senior - Advanced level (2019-20)
- Qualified for **Indian National Physics Olympiad (INPhO)**, having placed in **National Top 1%** out of over **50,000** candidates in **NSEP**, conducted by IAPT (2019-20)
- Qualified for **Indian National Astronomy Olympiad (INAO)**, through **NSEA** conducted by IAPT (2018-19)
- Recipient of the prestigious **Kishore Vaigyanik Protsahan Yojana (KVPY) Fellowship** awarded by the Govt. of India to 1500 out of 0.1 Million candidates, with **All India Rank 66** (2018)
- Awarded **National Talent Search Examination (NTSE) Fellowship** by NCERT, Govt. of India (2017-18)
- Secured **All India Rank 2** in ST category in **JEE-Main** out of over **1.4 Million** candidates. Achieved **All India Rank 7** in ST category in **JEE-Advanced** out of **150,838** candidates (2020)

INTERNSHIPS

Archiving Algorithm for Smart data Loader
Innovation Labs

(Summer 2022)
Linedata Services

- Successfully developed an algorithm that **archives huge csv files** using an SQLite database and pandas package in python.
- Smart data Loader is a web application designed for data integration using the **ETL process**.
- Linedata services is a global solutions provider dedicated to the investment management and credit community. It provides software services and value added data. In 2021, it realised revenue of €160.2M.

KEY PROJECTS

Float Moodle - A Moodle Clone (Web Development)
Prof. Amitabha Sanyal | Course Project - CS 251

(Autumn 2021)
IIT Bombay

- Creating a Learning Management System(LMS) **from scratch** using **Django's MTV structure**.
- Administered a well organized API for data storage and transfer in **Python** with Django
- Learning to use **CSS** and **Bootstrap** for styling the frontend

Scotland Yard

(Autumn 2021)

Prof. Amitabha Sanyal | Course Project - CS 251

IIT Bombay

- Uses concept of **Concurrency in Java** to implement the popular game of same name.
- Using **Client-Server Model** and **threads** to generate random and manual players to play with synchronization.
- Learning to use **Semaphores and Barriers** to have mutual exclusion and variable control on various Processes and Threads

GitHub Profiles - Web Development

(Autumn 2021)

Prof. Amitabha Sanyal | Course Project - CS 251

IIT Bombay

- Created a **Django** app in **Python** using **PostgreSQL DB** which displays Github Profile, Repository statistics
- Used **Github APIs** and Python's requests module to obtain user's data according to their Github usernames
- Learnt to customize and interlink Models using **Signals**. Deployed to **Heroku** using **Heroku-Github pipeline**

Search and Share files - Socket Programming

(Spring 2022)

Prof. Kameshwari Chebrolu | Course Project - CS 224

IIT Bombay

- Implemented socket programming to simulate file transfer with **different TCP variants and network conditions**.
- Worked on **establishing connections** with given neighbours with each peer acting as both server and client. Search for files in **immediate and depth 2**. Download if found.
- Used **Multi-threading** to enable a single peer to serve multiple request concurrently on different ports.

OTHER PROJECTS

Auto Grader

(Autumn 2021)

Prof. Amitabha Sanyal | Course Project - CS 251

IIT Bombay

- Successfully developed a code which automatically evaluates assignment submissions of a group of students
- **Automatically evaluates** C++ codes based on their outputs, given desired outputs for the assignments
- Developed entirely using **Bash Script**. Also limits runtime of the code

Data Cleanup

(Autumn 2021)

Prof. Amitabha Sanyal | Course Project - CS 251

IIT Bombay

- Using **Sed and Awk** implemented Text Pre-processing, Text tokenization, Data Analysis (converting tokens to text and calculating their frequency). Also implemented **Data Interpretation** - Extracting required **data from website** through its saved html file and analysing it

TECHNICAL SKILLS

Programming

C/C++, Python, Java, Bash, Sed, Awk, Prolog, GNU Debugger

Web Development

HTML, CSS, postgresSQL, Django, Flask, SQLAlchemy, Marshmallow

Software

Quartus, MATLAB, Git, L^AT_EX, AutoCAD, FLTK, ETL Tools like Microsoft SSIS

KEY COURSES UNDERTAKEN

Computer Science

Abstractions and Paradigms, Data Structures and Algorithms, Discrete Structures, Data Analysis and Interpretation, Software Systems Lab, Digital Logic Design, Design and Analysis of Algorithms, Logic for Computer Science, Computer Networks, Computer Architecture*, **AI and ML***, Operating Systems*, Implementation of Programming Languages**, Automata Theory**, Database and Information systems**

Mathematics

Calculus, Linear Algebra, Differential Equations

Others

Introduction to Electrical and Electronics Circuits*, Quantum Physics and Application, Basics of Electricity and Magnetism, Engineering Graphics and Drawing, Physical Chemistry, Organic and Inorganic Chemistry, Biology

**to be completed by November 2022*

***to be completed by May 2023*

EXTRACURRICULAR ACTIVITIES

- Pursuing **Certificate** in **Kuchipudi Dance** Form from Potti Sreeramulu Telugu University. (ongoing)
- Placed **All India 19th** at National U-13 School Chess Championship. **FIDE Rating - 1096**. (2014)
- Placed 2nd in **District level Inter School Yogasan Competition** and qualified for **State level** among 100+ candidates (2012)
- Organized cultural, game events on Children's Day at Govt. Elementary School at my **native tribal village, Kindra** to bring awareness to effective **Teaching methods**. Also distributed school supplies. (2019)
- Volunteered at House for Disabled, Aliabad on **Diwali** with food catering and firecrackers bought with **first income**. (2019)
- Completed 2 semester long volunteering program under **National Service Scheme (NSS)**, **IIT Bombay** by volunteering as student teacher at various education NGOs and creating video content for **Voice For Purpose** Youtube Channel, IIT Bombay. Channel focuses on educational content for the **visually challenged**. (2020-21)