

SARTHAK JOHNSON PRASAD | 18CS10049

COMPUTER SCIENCE & ENGG. (B.Tech 4Y)



EDUCATION			
Year	Degree/Exam	Institute	CGPA/Marks
2022	B.TECH	IIT Kharagpur	8.57 / 10
2018	All India Senior School Certificate Examination	Disha Delphi Public School	92.40%
2016	All India Secondary School Examination	Disha Delphi Public School	10 / 10
DDO IFCTS			

PROJECTS

Online Food Order Automation System, Course Term Project, IIT Kharagpur [Jan 2020 - April 2020]

- Co-developed a web application using Python to automate the set of activities carried out by online food ordering websites.
- Employed industrial software development techiniques including preparing SRS, DFD and UML diagrams in the project. • Worked on developing the backend for the web application using Flask, Blueprints, SQLAlchemy and PostgreSQL.
- Incorporated features like order placement, menu modification, inventory management and printing receipts.

Listen To This KGP!

[March 2020 - Present]

- Co-developed a web application that acts as a client and music player to the Facebook group "Listen To This KGP!".
- Built and published an Open Source Python package with 2 other contributors to extract metadata (artist, album, genre and popularity index) of a song from Spotify API using its YouTube URL.
- Worked on scraping raw data from the music sharing group using Facebook Graph API and extracting the relevant song data to be displayed at the frontend of the web application.

COMPETITION/CONFERENCE

General Championship | Data Analytics

[Feb 2020]

- Dataset contained the value of electricity consumption of 5 buildings across Delhi-NCR noted in 3 different electrical meters
- Using exploratory data analysis, seasonality and average usage was calculated to observe patterns in time series data.
- Used Fast Fourier transform to observe the anomalies, causes for them and finding frequency for those anomalies
- Made use of Facebook Prophet and Holts winter exponential smoothing for different parts of time series, stacked these predictions and used XGBoost regressor for optimal prediction of electricity usage.

POSITIONS OF RESPONSIBILITY

Assistant Editor | The Scholars Avenue

[Jan 2019 - Present]

- Currently leading a team of 20 students representing the official media body of IIT Kharagpur.
- Sponsorship incharge for the Freshers magazine issue which was read by a community of over 11,000 students.
- Ensured media coverage inside the IIT campus by writing articles targeting critical issues related to student welfare.
- Interviewed and Interacted with a wide range of professors, professionals and artists who visited the IIT Kharagpur campus.

AWARDS AND ACHIEVEMENTS

- Obtained a Rank of 8,568 in FB Hacker Cup(Qualifying Round) among 32,699 participants and qualified for Round 1. [2020]
- Peak Rated 1634 3-Star Division-2 Coder on Codechef and Level 7 on InterviewBit platforms.

[2020]

[2018]

- Secured AIR 984 among 2.3 lakh students in JEE Advanced and AIR 5773 among 15 lakh students in JEE Mains.
- Secured an All India Rank 165 in Kishore Vaigyanik Protsahan Yojana (KVPY), conducted by IISC, Bangalore

[2017]

Awarded National Talent Search Examination (NTSE) Scholarship by NCERT, New Delhi.

[2016]

SKILLS AND EXPERTISE

Languages/OS: C, C++, Python, JavaScript, UML, Verilog, Windows, Ubuntu.

Tools/Libraries/Databases: C++ STL, Flask, Git, Node, React, SQLAlchemy, PostgreSQL, Tensorflow, Keras, scikit.

COURSEWORK INFORMATION

Completed: Algorithms-I*, Programming and Data Structures*, Software Engineering*, Probability and Statistics, Formal Languages and Automata Theory, Discrete Structures, Switching Circuits and Logic Design*, Signals and Networks* Ongoing: Computer Architecture and Organization*, Compilers*, Algorithms-II, Cryptography and Network Security (*marked courses have a Laboratory Component as well)

EXTRA CURRICULAR ACTIVITIES

- Volunteer at National Service Scheme(NSS) IIT Kharagpur [2018-2020]. Taught the students of a primary school, conducted regular surveys and also lead the cleaning team in Gholgoria village, West Midnapore.

 • Part of the Open Source Team and Data Analytics Team at Madan Mohan Malviya Hall of Residence, IIT Kharagpur.
- Fédération Internationale des Échecs(FIDE)-Certified Chess Player since 2012.