

Academics

2019-2023 GPA	B.Tech in Mechanical Engineering, IIT Kharagpur 10.00/10.0 (Ongoing)
2016 - 2018 Percentage	AISSCE (10+2) CBSE from Air Force Bal Bharti School, New Delhi 97.2% (486/500) ** Awarded Best Student in Technology and 9 other awards by Mrs. Dhanoa (Chief of AFWAA) and Mr. BS Dhanoa (Chief of Air Staff).
2014 - 2016 CGPA	AISSE (10th) CBSE from Air Force Bal Bharti School, New Delhi 10.00/10.00 CGPA

Experience

Dec 19 Jan 20	Software Development Intern: ERP Product Scheduling Module - Implemented automated scheduling of products and improvised their algorithms for distribution of workload. - Worked using ASP.NET with MVC, C#, MS SQL Server by the help of SCRUM Methodology (Agile Framework).	Impact IT UK Pvt Ltd
Aug 19 Apr 20	Full Stack Developer: Admin Portal and Event Portal - Developed the back-end of the Global Entrepreneurship Summit 2020 Website, E-Cell, IIT Kharagpur. - Developed the front-end and back-end of Admin Portal, E-Cell, IIT Kharagpur by the help of which team members will be able to alter information on the website without the help of Web Development Team.	Entrepreneurship Cell, IIT Kharagpur
Dec 19 Present	Web Developer: Digitalization of BC Roy Hospital - Currently working with team of student to create a digital portal for B.C. Roy Technology Hospital, Indian Institute of Technology, Kharagpur. After its development, it is intended to have patient's appointment, reports and other features of a hospital available online.	TSG, IIT Kharagpur
Aug 18 Present	Founder and CEO and Developer: Baryxenos - Building an Operating System and other software for Personal Computer and Smartphone which work on Artificial Intelligence and Natural Language Processing thereby reducing (eliminating) the use of keyboard and mouse in the computer system. (First Version: BaXe Hydrogen OS). - Developing a system which is able to understand the mood of the user with the help of their facial reaction and voice and making suitable changes to comfort the user.	New Delhi

Projects

- **KGPAmica, Recreator and Developer** Feb 2020 – May 2020
The popular study material sharing website (which was closed) is remade with features like personalised dashboard & material with multiple other interactive feature (using HTML, CSS, JS, PHP, ActionScript, MySQL, and frameworks).
- **The Classic Chess** Oct 2019 – Nov 2019
The classic game of chess with single-player mode against self-developed artificially intelligent agent. The AI uses minimax-algorithm along with alpha-beta pruning and various other optimizations. The board heuristics used is a weighted combination of piece-value, mobility and other factors.
- **Sign Language Translator for Speech-Impaired** Aug 2018 – Oct 2018
The main objective is to translate sign language to text/speech. The framework provides a helping-hand for speech-impaired to communicate with rest of the world using sign language. This leads to the elimination of the middle person who generally acts as a medium of translation. This would contain a user-friendly environment for the user by providing speech/text output for a sign gesture input.
It uses Rule Based Classifier and Background subtraction method by detecting the colour of skin using HSV (Hue Saturation Value) model. (using OpenCV, python3, matplotlib, MySQL, MATLAB).
- **A.T.L.A.S: App Time Limit Alerting System** Jul 2018 – Sep 2018
Made using tkinter, win32gui, smtplib, winsound, _thread. It is a productivity application which helps to limit the hours spend on Digital Devices and keeps track of time spent and notifies you when you exceed the time barrier.
- **ConnectEd** Apr 2020 – Present
A Social Network, ConnectEd, so as to connect the students with their University Alumni and help them easily ask doubts from their faculty. They can post their photos, create groups, ask doubt from faculty, connect with the alumni.

Research Projects

- Human Problem-Solving

Apr 2020 – Present

Guide: Prof. Partha Pratim Chakrabarti & Prof. Rajlakshmi Guha
Department: Computer Science Engineering
Field: Artificial Intelligence, Cognitive Science
Under Cognition Language and Information Processing (CLIP) Laboratory

- Agent Based COVID19 Modelling

May 2020 – Present

Guide: Prof. Partha Pratim Chakrabarti, Prof. Sudeshna Sarkar, Prof. Arijit Mondal, Prof. Debdoot Sheet, Prof. Adway Mitra
Department: Computer Science Engineering & Economics
Field: Artificial Intelligence, Economics, Simulation
Under Centre of Excellence in Artificial Intelligence, Indian Institute of Technology Kharagpur

Technical Skills

Languages	C/C++, C#, Python, Java, Fortran, Objective-C, Ruby, R, Scala, Rust, Julia, F, F#, Haskell, Lisp, Mercury, Prolog
Web Technologies	HTML, CSS, JavaScript, PHP, Go, NodeJS, Groovy, Hack, Perl, LaTeX
Libraries / Frameworks	OpenCV, .NET Core, SpringBoot, Flask, Django, ReactJS, AngularJS, ASP.NET, jQuery, Bootstrap, Laravel, Ruby-on-Rails, SaaS, PyTorch, Keras, NumPy, TensorFlow
DBMS	MySQL, SQLite, MongoDB, PostgreSQL, MS SQL Server, OracleDB
Systems / Platforms	Docker, Heroku, Azure, GCP, AWS, Pivotal Platform, Digital Ocean
Shell	PowerShell, Unix, Bash
Android and iOS Dev	Kotlin, Xamarin, Flutter, ButterKnife, CUBA, Swift
Other	Git, MATLAB, SAS, Android Studio, Solidworks, AutoCAD, Arduino

Activities & Leadership

- **Chief Technology Officer, Lossparrow:** A customized product-based startup. Leading a team of 5 students from first and second year from Indian Institute of Technology for the development of required services of website and technology.
- **Student Volunteer, National Service Scheme:** - Teaching Students in Village Area where there is a lack of quality education. Helped Swameshwarpur village in growing a Mango farm. Took part and won gold medal in NSS Winter Camp for volunteer work. Nominated as Best NSS Volunteer from IIT Kharagpur. Participating in training of NSS Volunteer for COVID19.
- **Open-Source Involvement:** Frequently keep contributing in organisations like Boost C++, CircuitVerse.org and Creative Commons. Also, in IIT Kharagpur's Student Group: MetaKGP. Currently, developing a community under KGPAmica where students of IIT Kharagpur will be able to collaborate and build projects.