



EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2025	B.TECH	IIT Kharagpur	8.87 / 10
2020	AISSCE (CBSE XII)	Shriji Baba Saraswati Vidya Mandir	94%
2018	AISSE (CBSE X)	Shriji Baba Saraswati Vidya Mandir	96.4%

PROJECTS

fERP - Feedback ERP

Nov '22 - Present

- Developed & launched fERP, a **browser extension automating feedback form filling for IIT Kharagpur students**, used by **300+ students**
- Engineered and ensured seamless compatibility with **Chromium and Firefox based browsers**, expanding accessibility to a bigger user base
- Implemented **3 feedback modes** - *positive, negative, neutral* - optimizing user experience and ensuring diverse feedback representation
- Enhanced efficiency by **automating the transition to the next course/professor upon form submission**, saving valuable time and efforts
- Garnered rave user reviews**, showcasing fERP's influential role in automating workflow and enhancing satisfaction for a growing user base

MetaHub

Jan '23 - May '23

- Revamped MetaHub**, a **PtokaX-based Direct Connect (DC) Hub** exclusive to the **campus network**, simplifying the configuration process
- Meticulously identified and expertly **resolved compilation errors in PtokaX**, ensuring a successful build and seamless installation process
- Rectified a critical bug** affecting the ban functionality, resolving issues with incorrect redirection & significantly improving server stability
- Developed scripts to **automate the setup, start, and stop processes** of the PtokaX server, enhancing efficiency and ease of management
- Implemented a script to **monitor the status of the server**, ensuring continuous operation & proactive monitoring for optimal performance
- Successfully established a reliable **system startup service** for PtokaX, guaranteeing uninterrupted server availability & seamless operation
- Extended the service to **handle static IP configuration** when the host device changes locations, improving network stability & accessibility

ERP Login Module

Jul '23

- Developed and published the highly sought-after **iitkgp-erp-login**, **Python package on PyPi**, catalyzing a remarkable surge in user adoption
- Successfully achieved an outstanding **90% reduction in login workflow lines**, significantly enhancing code conciseness and maintainability
- Implemented cutting-edge **OTP support**, using the **Gmail-enabled Google API** to fetch the latest OTP mail, ensuring swift login experience
- Received accolades for exceptional coding practices and delivering a reliable package that **significantly simplified ERP login for student**

Gsync

Apr '22 - May '22

- Developed in **Bash** for automating **real-time synchronization of files** and folders from a **local system to GitHub** as a convenient **service**
- Implemented crucial **service functionalities** - start, stop, status, restart, enable, & disable, with **innovative selective-start/stop concepts**
- Elevated user experience through efficient troubleshooting & enhanced ease of use with the implementation of **colored log management**

Code Runner

Mar '22 - Jul '22

- Developed this tool in **Bash** for **Linux and Unix users**, streamlining compilation and execution of code in various programming languages
- Provided convenient installation and effortless updates by making the tool readily available on **Homebrew** and **AUR (Arch User Repository)**
- Implemented precise **Python version detection** with an impressive **accuracy rate of 90%**, guaranteeing smooth programming experience
- Seamlessly integrated **Vim & VS Code keybindings**, optimizing the development flow for uninterrupted coding & maximizing productivity
- Elevated user experience by enabling support for **files with spaces in their names**, facilitating seamless file management and organization
- Integrated a **debugging mode**, enabling streamlined troubleshooting and effective code optimization for enhanced software performance
- Attained a **unified framework** for all compilers & debuggers, significantly simplifying development across multiple languages with one tool

POSITIONS OF RESPONSIBILITY

Core Team Member | Kharagpur Open Source Society | IIT Kharagpur

May '22 - June '23

- Orchestrated **multiple student workshops**, championing the adoption of **open source culture** and cultivating awareness among students
- Took a proactive and hands-on approach, **overseeing all aspects of workshop organization**, from planning to execution and assessment
- Organized** and conducted **KWoC 2022 - Kharagpur Winter of Code** - a highly successful **open-source event** with **over 1,200 participants**
- Developed **automated workflows for internal processes**, including **certificate generator** for KWoC and various Positions of Responsibility
- Developed an efficient & **automated system** to seamlessly **generate the Mentor-Mentee tree** promptly and accurately upon batch updates

Mentor at Kharagpur Winter of Code '22

Dec '22 - Jan '23

- Mentored 9 students**, providing comprehensive guidance on **5 impressively noteworthy open source projects** touching multiple subjects
- Received overwhelmingly **positive feedback from all students**, appreciating the profound impact of my mentorship in their event journey

SKILLS AND EXPERTISE

- Languages & Databases:** Bash • Golang • Java • JavaScript • Python • YAML • HTML • CSS • C • C++ • Lua • LaTeX • PostgreSQL • MongoDB
- OS Platforms:** Linux 5/6 (Debian, Fedora, CentOS, Arch) • Unix(Free BSD, Open BSD, Solaris-8,9,10 & MacOS X) • Windows (7, 8.1 and 10)
- Others:** Git and GitHub • Networking • Linux System Administration • Backend Development • Web Browser Extension Development • Penetration Testing (Cybersecurity) • Gurobi and CPLEX Optimisation • Object Oriented Programming • Data Structures and Algorithms

ENTREPRENEURIAL EXPERIENCES

Co-Founder | Cybernity

May '20 - Jan '22

- Spearheaded the **establishment & exponential growth** of a **cybersecurity community**, fostering genuine principles and **ethical practices**
- Led** and managed a highly skilled **team of 18 members** during peak periods, driving seamless collaboration & achieving exceptional results
- Developed & administered** a vibrant **discussion forum**, fostering a community of **3k+ users** & facilitating extensive knowledge exchange

COURSEWORK INFORMATION

Programming and Data Structures (T/L) • Linear Algebra, Numerical and Complex Analysis (T) • Probability and Statistics (T)
Operations Research-I (T) • Operations Research-II (T/L) • Work System Design (T/L) • Advanced Calculus (T) • Transform Calculus (T)