

Academics

2017-2022 | *B.Tech + M.Tech (Dual Degree)* in **Computer Science and Engineering**, IIT Kharagpur
GPA **8.38/10.0** (Ongoing)

Experience

- May 19** | **Student Software Developer: Sample Platform** | **CCExtractor, Google Summer of Code 2019**
Aug 19 | - Implemented code sanity checking mechanisms, increase unit-test coverage from 60.2% to 90.1%, implemented database migration methods and improved time estimation algorithm's accuracy with DB schema modification.
- Improved regression testing and file diff algorithms, parallelized working of Kernel Virtual Machines to run multiple platforms in concurrency and curated automation scripts for updating test files and outputs.
- May 19** | **Backend Engineering Intern: Income Tax Filing Tool** | **ClearTax, Bangalore**
July 19 | - Updated stale data in micro-services and API data-layers and synchronized ITR-2, ITR-3 and ITR-4 filing with Income Tax Department's new schema for 2018 fiscal-year ITR filing while retaining backward compatibility.
- Improved DevOps using IIS Manager, Scalyr, Spinnaker and TensorFlow (with OpenCV and Keras) to setup up better logging, improved automation and Income Tax Department's captcha solver (achieving 94.3% accuracy).
- Enabled A/B testing with **GTM** and **Google Optimize**; orchestrated **Retool** tools improving sign-up funnel results.
- May 18** | **Student Software Developer: Project Nephos** | **CCExtractor, Google Summer Of Code 2018**
Aug 18 | - Authored CLI to automate recording, processing and uploading IPTV streams for University Of Navarra, Spain.
- Using best practices for error handling, DBMS, FTP handling in Python, scheduling, modular configuration implementation, logging and **DRY methods** increased throughput by 400+% with 0 required restarts on failures.
- Dec 18** | **Software Engineering Intern: VWO** | **Wingify, New Delhi**
Jan 19 | - Dockerised core components of VWO reducing migration and production setup time by 80%.
- Optimized data queries and reliability with UX changes reducing the campaign creation dropout rate by 30%.

Projects

- **CloudCron, Co-Founder**
Software as a Service (SaaS) platform to ease the setting up and execution of cron-tasks; led the tech-team with stack comprising of GCP (AppEngine, CloudSQL, PubSub, CloudScheduler), Python, PostgreSQL, Kubernetes API and more.
- **DigiCon, OpenSoft 2018 IIT Kharagpur**
Gold winning entry to the Inter-Hall Opensoft, IIT Kharagpur; parses doctor's handwriting with character recognition.
- **ConnectAll, Hack-A-BIT 2019**
Developed in 36 hours during Hack-A-BIT 2019, ConnectAll is a platform that enables specially-abled to use technology with equal ease as everyone else and offers Zulip integration for corporate usage.

Technical Skills

Languages	JavaScript (Node.js), Python, C, Golang, PHP, Java
Libraries / Frameworks	OpenCV, .NET Core, SpringBoot, Flask, Django, ReactJS, AngularJS, ASP.NET
DBMS	MySQL, SQLite, MongoDB, PostgreSQL
Systems / Platforms	Docker, Vagrant, Heroku, Azure, GCP, Pivotal Platform, Digital Ocean
Technologies / Sys Admin	REST, GraphQL, Protobuf, Blockchain, Nginx

Activities & Leadership

- **Team Member, InfoSec, Inter IIT Tech Meet:** Bagged fourth position (competing against all other 22 IITs) in Jeopardy Style Security CTF organised by **Payatu** in Inter IIT Tech Meet 8.0 held at IIT Roorkee.
- **Head of Technology, IIT Technology Ambit:** A magazine start-up delivering latest research and incubation digest right from IITs. Leading a team of 6 developers to provide sustainable and easy-to-maintain services for digital distribution with complete **open-source solutions**, estimated to serve 2000+ users at launch.
- **Students' Technology Coordinator, Technology Gymkhana, IIT Kharagpur:** The highest nominated technical position in the institute; responsible for **GymKhana website** maintenance, Institute's app development, students' grievance portal, etc.
- **Student Speaker, Pragma IIIT Allahabad:** Had the opportunity to share my experience regarding **efficient methods of planning, programming for perpetual processes**, avoiding overhead maintenance costs and denial of service.
- **OpenSource Involvement:** Mentored high school students for GCI 2018 under **CCExtractor**, top mentor for **GSSoC 2018** and **Sol 2019, IIT Dharwad**. I've successfully conducted (as a organizing cum web team member) **GirlScript Summer of Code 2019** and **Kharagpur Winter of Code 2018**. Currently, I'm the Web Team Head for GirlScript Summer of Code 2020.
- **Maintainer, MetaKGP IIT Kharagpur | Executive Member, KOSS IIT Kharagpur:** Responsible for promoting and maintaining open-source culture and **tools** (campus-centric) such as knowledge wiki, APIs, services, scrappers and bots.