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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 – Aug 19   **Student Software Developer: Sample Platform**   **CCExtractor, Google Summer of Code 2019**
- Implemented code sanity checking mechanisms, increase unit-test coverage from 60.2% to 90.1%, implemented database migration methods and improved time estimation algorithm' 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 – July 19   **Backend Engineering Intern: Income Tax Filing Tool**   **ClearTax, Bangalore**
- 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 – Aug 18   **Student Software Developer: Project Nephos**   **CCExtractor, Google Summer Of Code 2018**
- Authored CLI to automate recording, processing and uploading IPTV streams for University Of Nevarra, 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 – Jan 19   **Sofware Engineering Intern: VWO**   **Wingify, New Delhi**
- 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, Heroku, Azure, GCP, AWS, 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 SoI 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.