

Academics

2017-2022 | *B.Tech + M.Tech (Dual Degree) in Computer Science and Engineering, IIT Kharagpur*
With Micro-Specialization In Entrepreneurship And Innovation
GPA | **8.70/10.0**

Experience

May '21 | **Software Engineer: User-Master Team** | **Mercari, Japan**
Jun '22 | - Designed process for migration of the monolith Mercari HTTP APIs (PHP) serving transaction data into gRPC micro-service (Golang) to optimize load-cost, decouple independent services, and increase maintainability.
- Designed & developed i18n middle-ware for Mercari's microservices-kit, reduced engineering hours for client-config updates to 0 from 4hrs/week and refactored the microservices' code to improve extensibility.
- In line with OpenSource culture, improved org-wide documentation for QA, release processes, and decommissioning micro-services; optimizing costs (2M Yen/Annum) and improving production-release speed and security.

May '20 | **FullStack Intern: Skillbee IPI Connect** | **Skillbee, Noida**
Jul '20 | - Refactored methods and data structures by analyzing Node heap usage pattern to reduce memory footprint.
- Fabricated architecture and implemented *fan-out on write* global and *fan-out on read* personal activity feed using *Stream Framework* and *Elasticsearch* respectively - reducing avg. feed generation time from 4 secs to 300 ms.

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.

May 19 | **Backend Engineering Intern: Income Tax Filing Tool** | **ClearTax, Bangalore**
Jul 19 | - Updated ITR-2, ITR-3 and ITR-4 filing to 2018-19 fiscal-year schema 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).

Dec 18 | **Software Engineering Intern: VWO** | **Wingify, New Delhi**
Jan 19 | - Dockerised core components of VWO reducing migration and production setup time roughly by 80%.
- Optimized data queries and reliability with UX changes reducing the campaign creation dropout rate by 30%.

May 18 | **Student Software Developer: Project Nephos** | **CCExtractor, Google Summer Of Code 2018**
Aug 18 | - Authored head-less tool to automate recording, processing and uploading IPTV streams for University Of Navarra, Spain and others - increasing throughput by over 400+% with no human intervention required to handle failures.

Projects

- **CareShare, Lead Developer**
Developed at **Zealth-AI** (under *Antler* and *YC-W21*), a platform for remote monitoring and diagnosis of Covid-19 & Cancer patients with i18n support. The product was pilot tested at 50+ hospitals including *PGI Rohtak* and *AIIMS*.
- **CloudCron, Polyglot.Network**
Software as a Service (SaaS) platform to ease the setting up and execution of cron-tasks; developer with stack comprising of GCP (AppEngine, CloudSQL, PubSub, CloudScheduler), Python, PostgreSQL, Kubernetes API and more.
- **ConnectAll, Hack-A-BIT 2019**
Developed in 36 hours, ConnectAll is a platform that enables specially-abled to easily interact with conventional tech.
- **DigiCon, OpenSoft 2018 IIT Kharagpur**
Gold winning entry to the Inter-Hall Opensoft, IIT Kharagpur; generates digital prescription from doctor's handwritten.

Activities & Leadership

- **Office Setup, Mercari India:** Streamlined targeting of hiring process, improve employer branding initiatives, and lead technology meet-up sponsorships for setting up **Center of Excellence** in Bangalore, India for Mercari, JP.
- **OpenSource Involvement:** Mentored **Make SwagLyrics Great Again** and **Sample Platform** in GSoC 2020 and GSoC 2021-2022, and high school students for GCI 2018 and GCI 2019 under **CCExtractor**, top mentor for **GirlScript Summer of Code (GSSoC) 2018** and **Sol 2019, IIT Dharwad**. I've successfully conducted **Kharagpur Winter of Code 2018**, **GSSoC 2019**, and **GSSoC 2020**.
- **InfoSec, Inter IIT Tech Meet:** 1st position (among 22 sister IITs) in Saptang Lab's Network Security Hackathon and 4th position in Payatu's Jeopardy Style CTF respectively in Inter IIT Tech 9.0 (IIT Guwahati) and Inter IIT Tech 8.0 (IIT Roorkee).
- **Head of Technology, IIT Technology Ambit:** Lead a team of 6 developers to provide sustainable and easy-to-maintain services for digital distribution of content with **open-source solutions**, estimated to serve 2000+ users on monthly basis.
- **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, timetable manager, scrappers and bots.